1878mae.proj..377.

KG
11365
376
P15

DIARY
1878

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KG-11365.1376

To reduce measures from gauge C, allow 0.011 inches for every eighth of an ounce, and add as follows: under 2 ounces 0.000
" $5\frac{1}{8}$ " 0.001
" $9\frac{1}{8}$ " 0.002
" $13\frac{3}{4}$ " 0.003
" $17\frac{5}{8}$ " 0.004
" $21\frac{1}{2}$ " 0.005

Ar. co. log. for reduction from gauge C 8.94575
" " " " made with tube $1\frac{13}{16}$ inches across inside 9.82714

" snow measures

{Names of clouds on Poëy's system}	{Corresponding abbreviations used here}	
Cumulus	M	P is used to denote clouds
Pallio-cumulus	Pm	which may be considered as
Fracto-cumulus	Fm	either Pm or Pr.
Cirrus	R	
Pallio-cirrus	Pr	
Cirro-stratus	Rs	
Cirro-cumulus	Rm	

Reductions of thermometers to covered bulb of psychrometer, according to observations made in 1877.

Uncovered bulb		No. 4		C. 3235	
Limits	Reduction	Limits	Reduction	Limits	Reduction
Below 27	+0.6	Below 28	+0.1	Below 29	−0.6
27 to 40	+0.4	28 to 50	−0.1	29 to 46	−0.8
40 to 48	+0.3	50 to 65	−0.2	46 to 51	−0.6
48 to 50	+0.2	65 to 77	−0.3	51 to 68	−0.5
50 to 65	+0.1	77 to 81	−0.4	68 to 75	−0.3
65 and over	+0.2	81 to 86	−0.5	75 to 80	−0.2
		86 and over	−1.0	80 and over	0.0

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Kew Certificate of
Casella 15-196 (bought by Th. A. R. Jan. 1878)

	Corrections
32°	0.0
42	−0.1
52	−0.1
62	−0.2
72	−0.1
82	−0.1
92	−0.2

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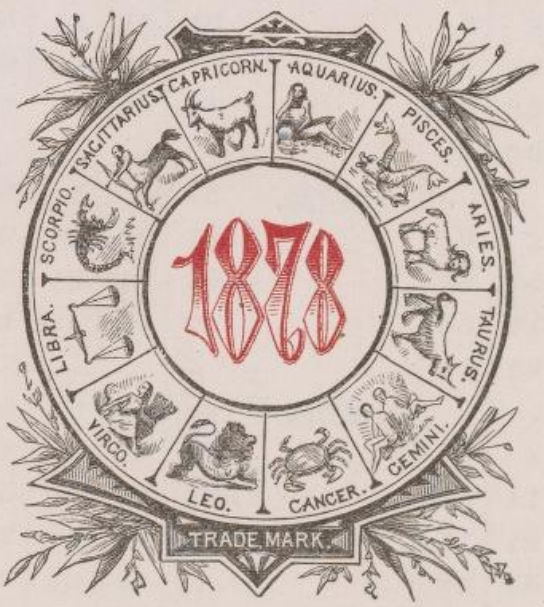
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THE

STANDARD

Diary



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Counting-House Almanac for 1878.

	Sund.	Mond.	Tues.	Wedn.	Thurs.	Frid.	Satur.
	...	...	...	...	...	...	...
JANUARY.	...	...	1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	...	...
FEBRUARY.	...	...	...	...	...	1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	...	...
MARCH.	...	...	...	...	...	1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31	...	...	...	...	...	...
APRIL.	...	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	...	...	...	...
MAY.	...	...	...	1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	...
JUNE.	...	...	...	...	...	...	1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	...	...	...	...	...	...

	Sund.	Mond.	Tues.	Wedn.	Thurs.	Frid.	Satur.
	...	...	...	...	...	...	...
JULY.	...	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	...	...	...
AUGUST.	...	...	...	...	1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	31
SEPTEMB.	...	...	...	...	...	...	...
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	...	...	...	...	...
OCTOBER.	...	...	1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	...	...
NOVEMBER	...	...	...	...	...	1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
DECEMBER	...	...	...	...	...	. .	...
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	...	...	...	...

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On orders not exceeding			$15	10 cents
Over $15	"	"	$30	15 "
" $30	"	"	$40	20 "
" $40	"	"	$50	25 "

When a larger sum than Fifty Dollars is required, additional orders to make it up must be obtained.

INTEREST TABLE.

SEVEN PER CENT.

TIME.		$1	$2	$3	$4	$5	$6	$7	$8	$9	$10	$100	$1000
1	DAY.	0	0	0	0	0	0	0	0	0	0	2	19
2	"	0	0	0	0	0	0	0	0	0	0	4	39
3	"	0	0	0	0	0	0	0	0	1	1	6	58
4	"	0	0	0	0	0	0	1	1	1	1	8	78
5	"	0	0	0	0	0	1	1	1	1	1	10	97
6	"	0	0	0	0	1	1	1	1	1	1	12	1 17
7	"	0	0	0	1	1	1	1	1	1	1	14	1 36
8	"	0	0	0	1	1	1	1	1	1	2	16	1 56
9	"	0	0	1	1	1	1	1	1	2	2	18	1 75
10	"	0	0	1	1	1	1	1	2	2	2	19	1 94
11	"	0	0	1	1	1	1	1	2	2	2	21	2 14
12	"	0	0	1	1	1	1	2	2	2	2	23	2 33
13	"	0	1	1	1	1	2	2	2	2	3	25	2 53
14	"	0	1	1	1	1	2	2	2	2	3	27	2 72
15	"	0	1	1	1	1	2	2	2	3	3	29	2 92
16	"	0	1	1	1	2	2	2	2	3	3	31	3 11
17	"	0	1	1	1	2	2	2	3	3	3	33	3 31
18	"	0	1	1	1	2	2	2	3	3	4	35	3 50
19	"	0	1	1	1	2	2	3	3	3	4	37	3 69
20	"	0	1	1	2	2	2	3	3	4	4	39	3 89
21	"	0	1	1	2	2	2	3	3	4	4	41	4 08
22	"	0	1	1	2	2	3	3	3	4	4	43	4 28
23	"	0	1	1	2	2	3	3	4	4	4	45	4 47
24	"	0	1	1	2	2	3	3	4	4	5	47	4 67
25	"	0	1	1	2	2	3	3	4	4	5	49	4 86
26	"	1	1	2	2	3	3	4	4	5	5	51	5 06
27	"	1	1	2	2	3	3	4	4	5	5	53	5 25
28	"	1	1	2	2	3	3	4	4	5	5	54	5 44
29	"	1	1	2	2	3	3	4	5	5	6	56	5 64
1	MON.	1	1	2	2	3	4	4	5	5	6	58	5 83
2	"	1	2	4	5	6	7	8	9	11	12	1 17	11 67
3	"	2	4	5	7	9	11	12	14	16	18	1 75	17 50
4	"	2	5	7	9	12	14	16	19	21	23	2 33	23 33
5	"	3	6	9	12	15	18	20	23	26	29	2 92	29 17
6	"	4	7	11	14	18	21	25	28	32	35	3 50	35 00
7	"	4	8	12	16	20	25	29	33	37	41	4 08	40 83
8	"	5	9	14	19	23	28	33	37	42	47	4 67	46 67
9	"	5	11	16	21	26	32	37	42	47	53	5 25	52 50
10	"	6	12	18	23	29	35	41	47	53	58	5 83	58 33
11	"	6	13	19	26	32	39	45	51	58	64	6 42	64 17
1	YEAR.	7	14	21	28	35	42	49	56	63	70	7 00	70 00

1878phae.proj — 377 .

TUESDAY, JANUARY 1, 1878.

	8	2	8
Bar.	29.592	29.630	29.667
Att. therm.	27.4	42.0	33.4
Psychr., dry & wet	15.7 14.5	29.9 23.3	25.1 20.8
No. 4	16.2	30.2	25.5
C. 3235 (wet)	14.9	24.0	22.2
Max., unset & set	32.8 18.8		
Min., — " —	15.4 15.8		
Gauge, oz. & inch.	0		
Aurora			Low faint arch
Zod. light			To Mars; dim
Wind	4 NW	3 NW	4 W
Clouds	0	0	0

At 7 3/4 A.M.

Uncovered bulb	15.6
Covered "	16.2
No. 4	16.2
C. 3235	16.8

Apparently dry

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WEDNESDAY, JANUARY 2, 1878.

	8	2	8
Bar.	29.725	29.677	29.684
Att. therm.	31.7	34.8	36.0
Psychr., dry & wet	22.8 21.4	33.9 31.1	30.0 28.0
No. 4	23.2	34.9	30.8
6.3235 (wet)	22.9	32.9	29.2
Max., unset & set	31.0 24.6		
Min., — " —	15.7 22.9		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	0 W	0 calm	1 NW
Clouds	1 PRs 7m	10 P 7m →	10 P

At 7 3/4 A.M.

Uncovered bulb	22.5
Covered "	23.1
No. 4	23.1
6 3235	23.9

Apparently dry

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THURSDAY, JANUARY 3, 1878.

	8	2	8
Bar.	30.116	30.280	30.362
Att. therm.	28.1	29.4	25.6
Psychr., dry & wet	Below graduation	13.4 10.9	Below graduations
No. 4	5.0	13.9	7.0
C.3235 (wet)	4.0	11.0	6.2
Max., wet & dry	34.9 8.5		
Min., — " —	4.5 4.5		
Gauge, oz. & inch.	T 0/8	0.011	
Aurora			None
Zod. light			To Mars; dim
Wind	14 NNW	7 NNW	0 NW
Clouds	0 P 7m	0	0

† Too little snow to measure except with the gauge, but apparently more than appears from that.

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FRIDAY, JANUARY 4, 1878.

	8	2	8 1/4
Bar.	30.286	29.900	29.416
Att. therm.	22.5	25.0	20.6
Psychr., dry & wet	Below graduations	30.7 31.2	37.7 38.3
No. 4	5.6	31.3	38.6
C. 3235 (wet)	5.8	31.8	39.0
Max., unset & set	14.4 8.3		
Min., — " —	0.0 5.1		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	2 N	11 E	7 E
Clouds	10 P	10 Snowing	10 P fine rain

Snow began about 11 A.M. Turned to rain before 7 P.M. At 7 P.M. raingauge cleared out. Two cylinders cut with glass $1\frac{13}{16}$ inches in diameter weigh together $3\frac{3}{8}$ ounces. The snow seemed to be of about average depth at the place. It was about as deep as the length of the glass.

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SATURDAY, JANUARY 5, 1878.

	8	2	8
Bar.	29.510	29.774	29.941
Att. therm.	33.0	44.0	28.0
Psychr., dry & wet	28.2 26.4	30.4 25.9	16.8 15.2
No. 4	28.7	31.0	17.2
C. 3235 (wet)	27.0	26.7	15.7
Max., wet & set	39.0 29.0		
Min., " "	5.1 28.1		
Gauge, g. & inch.	to $\frac{3}{4}$ 0.066		
Aurora			None
Zod. light			To Mars
Wind	8 W	10 W	3 SW
Clouds	2 P 7m	0 7m	0

† Rainfall before 7 P.M. Jan. 4, by measurement recorded on opposite page, 1.133 inches; rain since then 0.066 inches; total 1.199 inches. Measurements at 8 A.M. Jan. 5 gave by mean of 3 measures 4.5 inches of snow, 14.5 inches of which in cylinder $1\frac{13}{16}$ inches across received 5.5 ounces rainfall to 1 inch of snow 0.25477 inches; total rainfall 1.1146 inches. First measure preferred, since some snow was probably lost by melting during the night, even if there was snow enough to retain all the rain that fell. Deducting 0.011 for the snow previously on the ground (see Jan. 3), the rainfall is accordingly 1.188 inches.

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SUNDAY, JANUARY 6, 1878.

	8	2	8
Bar.	30.010	29.978	30.039
Att. therm.	24.2	39.0	27.0
Psychr., dry & wet	Below graduation 10.3	18.7 . 16.6	14.0 13.0
No. 4	10.4	19.3	14.4
C. 3235 (wet)	10.5	17.2	13.4
Max., unset & set	32.2 13.0		
Min., — " —	6.6 9.8		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 SW	3 W	2 W
Clouds	10 R	0 Fm	6 P

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MONDAY, JANUARY 7, 1878.

	8	2	8
Bar.	30.196	30.250	30.429
Att. therm.	22.2	34.8	19.6
Psychr., dry bulb	Below graduation	Below graduation 10.4	Below graduation
No. 4	— 0.3	12.8	3.0
C. 3235 (wet)	0.6	10.6	3.0
Max., moist bulb	19.8 3.5		
Min., — " —	—1.1 —1.1		
Gauge, oz. Inch.	0		
Aurora			None
Zod. light			To Mars; perceptible in spite of moon
Wind	0 calm	6 NW	0 calm
Clouds	1 P haze	1 Rs 7m	0

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TUESDAY, JANUARY 8, 1878.

	8	2	8
Bar.,	30.610	30.596	30.538
Att. therm.	Out of sight estimate 25 / 15.0	26.0	23.8
Psych., dry & wet	Below graduations	Below graduation 10.8	16.3 16.2
No. 4	−8.0	12.8	17.1
C. 3235 (wet)	−6.9	11.4	17.0
Max., must & alt	15.2 −1.0		
Min., — " —	−9.4 −8.8		
Gauge, 03 Inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	0 calm	0 calm	1 SE
Clouds	1 P Rs haze	9 P	10 P snowing

A few flakes of snow fell about 6 P.M.

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WEDNESDAY, JANUARY 9, 1878.

	8		2		8	
Bar.	30.410		30.360		30.362	
Att. therm.	24.0		33.0		29.6	
Psychr., dry & wet	15.9	16.2	29.8	26.5	25.5	24.2
No. 4	16.3		30.1		26.3	
C-3235 (wet)	16.8		27.7		25.3	
Max., wet & dry	18.1	18.5				
Min., — " —	−8.8	15.9				
Gauge, oz. & inch.	0					
Aurora						
Lod. light					Cloudy	
					Cloudy	
Wind	1 W		0 calm		0 calm	
Clouds	5 P 7m →		0		9 P 7m	

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THURSDAY, JANUARY 10, 1878.

	8	2	8
Bar.	30.144	29.856	29.492
Att. therm.	30.1	32.0	34.6
Psychr., dry & wet	27.8 27.6	35.8 35.9	41.4 41.9
No. 4	28.1	36.5	42.1
C. 3235 (wet)	28.1	36.8	42.6
Max., inset & set	30.9 28.6		
Min., — " —	15.7 27.4		
Gauge, oz. & inch.	0		7 5/8 0.673
Aurora			Cloudy
Zod. light			Cloudy
Wind	5 N	7 NNE	9 NE
Clouds	10 P	10 Pm	10 P raining

Rain beginning about 2½ P.M.

At 8h 18m P.M.
Bar. 29.463
Att. 35.5

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FRIDAY, JANUARY 11, 1878.

	8	2	8
Bar.	29.043	29.008	29.169
Att. therm.	36.2	36.7	37.2
Psychr., dry wet	35.3 35.4	35.8 35.9	33.6 33.0
No 4	35.7	36.6	34.3
C. 3235 (wet)	36.2	36.6	33.9
Max., unset wet	43.0 35.6		
Min., — " —	27.2 35.1		
Gauge, oz. Inch.	†11 3/4 1.037		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	5 SW	6 SW	8 WNW
Clouds	10 Pm mist	10 P raining	10 P snowing

† At 8 P.M. Jan. 10 0.673
8 A.M. Jan. 11 1.037
Total 1.710 inches.

Some rain during the day
At 6 1/4 P.M. a little snow.
Gauge C 1 ounce 0.088 inches

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SATURDAY, JANUARY 12, 1878.

	8	2	8
Bar.	29.736	29.859	30.002
Att. therm.	36.7	51.0	41.9
Psychr., dry & wet	35.8 32.2	42.9 37.4	39.0 34.9
No. 4	36.4	43.4	39.7
C. 3235 (wet)	33.1	38.3	35.8
Max., unset & set	37.9 36.2		
Min., — " —	33.6 35.9		
Gauge, oz. & inch.	†0		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	7 NW	13 NW	10 NW
Clouds	1 PRS 7m >	0	0

† At 6½ P. M. Jan. 11, 0.088 inches.

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SUNDAY, JANUARY 13, 1878.

	8	2	8
Bar.	30.144	30.121	30.071
Att. therm.	38.0	51.2	41.6
Psychr., dry & wet	30.4 29.5	41.6 37.4	35.3 33.9
No. 4	30.8	42.1	35.7
C. 3235 (wet)	30.9	38.5	36.0
Max., mst & set	43.4 31.7		
Min., — " —	29.9 30.5		
Gauge, 07. Inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 W	1 W	0 W
Clouds	7 P Rs Fm —	6 R Rs Fm	10 P

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MONDAY, JANUARY 14, 1878.

	8	2	8
Bar.	29.790	29.359	29.461
Att. therm.	40.0	41.6	40.9
Psychr., dry & wet	36.4 36.6	43.2 43.4	33.9 34.1
No. 4	37.4	43.6	34.8
C. 3235 (wet)	37.9	44.0	35.0
Max., unset & set	42.0 37.4		
Min., — " —	30.3 37.0		
Gauge, oz. & inch.	6 0.530		
Aurora			‡ Moonlight
Zod. light			Moonlight
Wind	5 E	0 W	1 S
Clouds	10 Pm raining	10 Pm fog	0 Rs haze

A little snow on the ground at 8 A.M.

At 5½ P.M. gauge C 4¼ ounces

‡ Prof. Pickering suspected aurora about 6¾ P.M.

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TUESDAY, JANUARY 15, 1878.

	8	2	8
Bar.	29,477	29.511	29.650
Att. therm.	39.7	43.3	42.0
Psychr., dry & wet	32.9 31.8	38.8 34.5	32.3 ‡ 27.9
No. 4	33.3	39.3	33.0
C. 3235 (wet)	32.9	35.4	‡ 28.6
Max., mat & set	43.4 33.6		
Min., " "	32.8 33.1		
Gauge, 07. & inch.	to		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	1 WSW	4 WSW	6 NW
Clouds	0 PRs 7m	10 Rm 7m →	10 Rm 7m →

† At 5½ P.M. Jan. 14 0.365 inches
‡ Not frozen; wetted at 7 P.M.

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WEDNESDAY, JANUARY 16, 1878.

	8	2	8
Bar.	29.874	29.987	30.075
Att. therm.	34.0	40.7	16.0
Psychr, dry bulb	14.1 13.1	15.2 12.1	Below graduations
No. 14	14.7	15.8	10.3
C. 3235 (wet)	13.4	12.9	9.0
Max., must bat	39.2 17.2		
Min., — " —	14.1 14.1		
Gauge, oz. Inch.	0		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	10 NW	13 NW	7 NW
Clouds	0	0	2 R Rs

Lunar halo 45° across at 10 P.M.

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THURSDAY, JANUARY 17, 1878.

	8	2	8
Bar.	30.228	30.211	30.174
Att. therm.	21.5	42.8	36.1
Psychr., dry bulb	Below graduations	21.2 18.0	21.1 19.1
No. 4	6.4	22.0	21.9
C. 3235 (wet)	5.9	19.0	21.0
Max., unst bat	19.0 9.0		
Min., " "	4.1 5.8		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 NNW	1 W	1 SE
Clouds	8 Pr Rs Fm	7 Pr Rs	10 R Fm →

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FRIDAY, JANUARY 18, 1878.

	8	2	8
Bar.	30.257	30.276	30.301
Att. therm.	31.6	37.8	37.0
Psychr., dry & wet	15.5 14.9	30.4 27.9	25.2 24.8
No. 4	16.2	31.3	25.9
C. B235 (wet)	15.6	29.8	26.0
Max., max't & set	24.6 18.0		
Min., — " —	5.8 15.6		
Gauge, oz. & inch.	0 {a few snowflakes on the ground		
Aurora			Moonlight
Zod. light			Moonlight
Wind	1 N	2 SE	1 SE
Clouds	1 Phaze	3 haze 7m	0 haze

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SATURDAY, JANUARY 19, 1878.

	8	2	8
Bar.	30.172	30.080	30.083
Att. therm.	32.7	39.4	39.9
Psychrs., dry & wet	25.4 25.6	41.6 37.6	36.1 34.2
No 4	25.8	41.9	37.0
C. 3235 (wet)	26.3	38.8	35.4
Max., mast & set	31.0 27.2		
Min., — " —	15.6 25.3		
Gauge, oz. & inch.	0		
Aurora			Moonlight
Tod. light			Moonlight
Wind	4 SW	4 SW	3 SW
Clouds	1 P haze	2 P 7m haze	0

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1878phae.proj.377

SUNDAY, JANUARY 20, 1878.

	8	2	8
Bar.	30.048	30.009	30.023
Att. therm.	37.6	39.8	41.9
Psychr., dry Bwet	†32.1 †31.9	48.3 44.7	41.5 41.1
No 14	†32.2	48.9	42.4
C. 3235 (wet)	†32.7	45.7	42.2
Max., unset Set	†43.3 †32.8		
Min., — " —	†25.2 †32.0		
Gauge, oz. Inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	1 SSW	3 WSW	1 S
Clouds	6 P 7m haze	10 Pm 7m	10 P raining

†At 8¼ A.M.

A little rain during the day; more in the evening.

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MONDAY, JANUARY 21, 1878.

	8	2	8
Bar.,	29.844	29.745	29.683
Att. therm.,	42.0	42.9	43.0
Psychr., dry & wet	39.6 39.9	42.9 42.7	38.0 38.4
No. 4	40.1	43.9	39.0
C. 3235 (wet)	40.8	43.4	39.3
Max., inst. & set	48.2 40.0		
Min., — " —	31.9 39.3		
Gauge, 0.Inch.	$7\frac{3}{8}$ 0.651		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 calm	0 N	0 calm
Clouds	10 P fog	10 P some fog	10 P fog

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TUESDAY, JANUARY 22, 1878.

	8	2	8
Bar.	29.564	29.537	29.582
Att. therm.	41.0	45.9	43.0
Psychr., dry bulb	37.1 37.3	45.6 42.5	37.2 34.8
No. 4	37.7	46.1	37.7
C. 3235 (wet)	38.0	43.6	36.0
Max., under bulb	43.2 38.4		
Min., " "	36.0 37.1		
Gauge, oz. Inch.	0 1/8 0.011		
Aurora			
Zod. light			Nom; some clouds cloudy
Wind	2 WSW	4 WSW	3 W
Clouds	10 Pm fog	4 Pm PrRRs 7m	2 P

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WEDNESDAY, JANUARY 23, 1878.

	8	2	8
Bar.	29.488	29.549	29.806 Out of sight; estimate 15.0
Att. therm.	40.8	37.8	
Psychr., dry & wet	34.4 34.4	19.3 16.7	Below graduations
No. 4	35.0	20.0	1.2
C. 3235 (wet)	35.2	17.2	1.0
Max., mar & set	45.4 35.4		
Min., — " —	33.4 34.4		
Gauge, oz. & inch.	1 1/8 0.099		
Aurora			† None
Zod. light			To Mars; joins galactic light
Wind	3 SW	14 WNW	15 WNW
Clouds	10 Pm Fm —	5 P Fm /	0

† Long low arch with dark segment beneath at 9½ P.M.

A little snow about 10 A.M.

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THURSDAY, JANUARY 24, 1878.

	8	2	8
Bar.	30.285	30.291	30.235
Att. therm.	20.8	27.6	26.2
Psychr., dry & wet	Below graduations	20.0 16.9	19.8 18.0
No. 41	5.3	20.5	20.4
C. 3235 (wet)	4.7	17.8	19.0
Max., unset & set	35.6 10.5		
Min., —"—	0.9 5.0		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			None; some clouds Nearly to Mars (about 2°); faint zodiacal light
Wind	5 WNW	3 WNW	4 SSW
Clouds	5 PtRs 7m	5 PtRs	0 RRs

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1878phae.proj.0377.

FRIDAY, JANUARY 25, 1878.

	8	2	8
Bar.	30.144	30.100	30.163
Att. therm.	29.4	36.8	38.1
Psychr., dry & wet	28.4 26.6	43.7 36.9	33.6† 31.4
No. 4	28.9	43.8	34.4
6. 3235 (wet)	27.6	38.2	33.2
Max., must & wet	30.0 29.4		
Min., — & —	5.0 28.6		
Gauge, oz. & inch.	0		
Aurora			None; some clouds
Zod. light			Perceptible through haze
Wind	3 SSW	6 SSW	1 S
Clouds	5 R Rs 7m	4 R Rs	1 Phaze

† Not frozen

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SATURDAY, JANUARY 26, 1878.

	8	2	8
Bar.	29.924	29.734	29.803
Att. therm.	36.1	37.3	38.0
Psychr., dry & wet	35.4 35.8	35.9 36.4	36.1 36.1
No. 4	36.1	36.6	36.5
C. 3235 (wet)	36.8	37.0	37.0
Max., unset & set	43.4 36.0		
Min., — " —	28.8 35.4		
Gauge, oz. & inch.	4½ 0.395		
Aurora			None
Zod. light			About to Mars
Wind	1 N	2 NNW	2 SW
Clouds	10 Pm fog raining	10 Pm fog fine rain	1 Fm haze

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SUNDAY, JANUARY 27, 1878.

	8	2	8
Bar.	29.941	29.924	29.858
Att. therm.	37.2	42.5	42.5
Psychr., dry & wet	35.9 32.9	41.8 36.3	36.6 34.6
No. 4	36.4	42.4	37.4
C. 3235 (wet)	33.9	37.4	35.9
Max., mast & set	39.0 36.2		
Min., — " —	34.2 36.0		
Gauge, oz. & inch.	5 0.441		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 W	3 W	3 SSE
Clouds	0 Pm 7m	0 Rs 7m	10 P fog.

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MONDAY, JANUARY 28, 1878.

	8	2	8
Bar.	29.377	29.399	29.624
Att. therm.	39.4	39.5	30.7
Psychrom., dry & wet	36.7 37.0	35.7 33.0	16.7 14.1
No. 4	37.2	36.8	17.5
C. 3235 (wet)	37.8	33.8	15.0
Max., mast & set	42.4 37.2		
Min., — " —	34.2 36.6		
Gauge, oz. & inch.	3 0.265		
Aurora			None
Zod. light			Distinct to Mars
Wind	5 N	10 NW	14 NW
Clouds	10 Pm fog raining	10 Pm 7m 7m	0

At 6 P.M. gauge C 1 ounce

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TUESDAY, JANUARY 29, 1878.

	8	2	8
Bar.	29.951	29.999	30.082
Att. therm.	20.3	28.0	25.1
Psychr., dry & wet	Below graduations	19.1 16.0	16.9 15.0
No. 4	7.7	19.7	17.4
C. B235 (wet)	6.9	16.7	15.6
Max., wet & set	37.3 10.8		
Min., — " —	6.9 7.1		
Gauge, 0. Inch.	†0		
Aurora			None
Zod. light			Distinct to Hours
Wind	6 NW	8 N	4 SW
Clouds	0	0	0

†At 6 P.M. Jan. 28 gauge C 0.088 inches

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WEDNESDAY, JANUARY 30, 1878.

	8	2	8
Bar.	30.357	30.413	30.441
Att. therm.	21.4	27.6	25.0
Psychr., dry & wet	Below graduations	16.9 140	13.7 11.9
No. 4	5.5	17.5	13.9
C. 3235 (wet)	4.8	14.6	12.4
Max., must & set	21.9 8.2		
Min., — " —	4.9 5.1		
Gage, 03 inch.	0		
Aurora			None
Zod. light			Perceptible through haze
Wind	6 NW	5 NW	4 NW
Clouds	0	0	0 haze

Cloudiness increasing during the evening!

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1878phae.proj.0377

THURSDAY, JANUARY 31, 1878.

	8	2	8
Bar.	30.355	30.222	29.982
Att. therm.	24.2	26.3	29.8
Psychr., dry & wet	†17.7 †17.2	29.6 27.4	28.7 28.9
No. 4	†18.2	30.1	29.1
C. 3235 (wet)	†17.7	28.0	29.4
Max., unset & set	†19.3 †19.3		
Min., — " —	†5.0 †17.6		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	5 N	5 E	14 NE
Clouds	10 P Fra	10 Rm Fra	‡10 P snowing

† At 8¼ A.M.

‡ Much reddish light on clouds at 8 P.M. only over the sky; cause not apparent; it soon disappeared.

Snow began about 4 P.M.

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FRIDAY, FEBRUARY 1, 1878.

	8	2	8
Bar.	29.674	29.728	29.840
Att. therm.	30.7	30.9	27.7
Psychr., dry & wet	30.1 30.8	19.3 19.3	16.8 17.5
No. 44	29.5	19.5	17.4
C. 3235 (wet)	30.5	19.6	17.9
Max., unst. & set	30.0 30.2		
Min., — " —	17.5 29.7		
Gauge, oz. & inch.			
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	11 NE	10 NNE	10 N
Clouds	10 P snowing	10 P snowing	10 P snowing

Much snow last night and a good deal during the day.

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SATURDAY, FEBRUARY 2, 1878.

	8	2	8
Bar.,	30.044	30.082	30,150
Att. therm.	25.1	31.0	27.3
Psychr., dry & wet	Below graduation 10,3	18.9 16.4	Below graduation 11.4
No. 4	10,8	19,2	12,9
C. 3235 (wet)	10.2	17.0	12.0
Max., mst & wet	30.8 12.4		
Min., — " —	10.1 10.1		
Gauge, oz. & inch.	See snow measures.		
Aurora			None
Zod. light			Vertex about 1° below Mars
Wind	5 NNW	4 NNE	1 NW
Clouds	9 P Fm	0	0

Snow ceased during preceding night; the amount that fell after dark was trifling. Snow much drifted. Measured at 10 A.M. today in 20 places as follows: 20, 10½, 7, 21, 8½, 17, 17½, 18, 20, 14½, 17½, 12, 11, 7, 14, 11, 12, 10½, 17, 17; mean 14.15 inches. Weight of cylinders of snow cut with glass 1 7/10 inches across muzzle, and taken from three different places, as follows: 1st place, 11½ inches, weigh 3 ounces; 2d place, 11½ inches weigh 3 5/16 ounces; 3d place, 12½ inches weigh 3½ ounces. Hence rainfall to 1 inch of snow from 1st place 0.1752 inches; from 2d place, 0.2117 inches; from 3d place, 0.1880 inches; from the 3 places taken together, 0.1916 inches; total rainfall 2.710 inches.

Gauge C cleared out about 5 P.M.

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SUNDAY, FEBRUARY 3, 1878.

	8	2	8
Bar.,	30.171	30.134	30.060
Att. therm.	21.0	30.4	31.0
Psychr., dry & wet	Below graduations	27.3 22.9	21.2 19.5
No 24	2.3	27.3	21.4
C. 3235 (wet)	3.0	23.9	20.3
Max., mast & set	20.7 6.0		
Min., — " —	0.9 2.0		
Gauge, oz. & inch.	0		
Aurora			None
Zod. light			To Mars
Wind	0 W	1 W	2 SW
Clouds	0	0	0

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MONDAY, FEBRUARY 4, 1878.

	8	2	8
Bar.	29.854	29.769	29.778
Att. therm.	24.9	33.3	32.9
Psychr., dry & wet	Below graduations	†33.8 †27.3‡	22.9 21.6
No. 4	8.2	†33.8	23.5
C. 3235 (wet)	8.5	†28.8	22.0
Maxa., unset & set	29.6 10.6		
Min., " "	2.0 7.9		
Gauge, 03 inch.	0		
Aurora, Zod. light			None Vertex about 9° below Mars
Wind	0 calm	†2 N	0 N
Clouds	4 Pr Rs	†0 Pr	0 haze

† At 2¼ P.M.
‡ Not frozen

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TUESDAY, FEBRUARY 5, 1878.

	8		2	8
Bar.	29.830		29.868	29.922
Att. therm.	26.3		34.9	34.9
Psychr., dry & wet	14.6	14.9	34.0 †32.0	24.8 23.5
No. 4	14.9		34.5	25.9
C. 3235 (wet)	15.5		†32.0	25.0
Max., unset & set	34.0	16.6		
Min., — " —	7.9	14.4		
Gauge, 0.3 inch.	0			
Aurora				None
Zod. light				Perceptible in spite of moon
Wind	0 calm		1 NW	0 W
Clouds	0		1 Pt haze 7m	0

† Not frozen

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WEDNESDAY, FEBRUARY 6, 1878.

	8	2	8
Bar.	30.046	30.057	30.056
Att. therm.	31.3	39.8	39.1
Psychr., dry & wet	19.8 19.8	36.9 31.5	32.0 †29.0
No. 4	19.8	37.5	32.8
C. 3235 (wet)	20.2	32.9	†30.4
Max., wet & dry	35.0 21.0		
Min., — " —	14.4 19.0		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Moonlight
			Moonlight and clouds
Wind	0 W	3 W	2 SW
Clouds	0 haze	0 Ro 7m	0 Ro 7m

† Not frozen

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THURSDAY, FEBRUARY 7, 1878.

	8	2 1/2	8
Bar.	30.004	29.952	29.954
Att. therm.	35.6	45.0	43.8
Psychr., dry & wet	28.7 26.4	47.5 41.2	40.2 35.5
No. 4	28.4	48.0	40.3
C. 3235 (wet)	27.1	43.1	36.7
Max., unwet & wet	38.0 29.2		
Min., — " —	19.0 28.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Moonlight, Moonlight
Wind	3 SW	4 W	3 SW
Clouds	0 haze	0	0

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FRIDAY, FEBRUARY 8, 1878.

	8	2	8
Bar.	29.835	29.708	29.546
Att. therm.	37.5	43.0	44.3
Psychr., dry & wet	30.2 29.5	51.4 45.6	40.8 39.9
No. 4	30.7	52.0	41.2
C. 3235 (wet)	30.9	46.9	40.7
Max., mast & pit	48.2 31.4		
Min., — " —	27.0 30.1		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 SSW	3 S	3 E
Clouds	9 R Rs 7m	9 P 7m	10 P

Rain in the evening.

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SATURDAY, FEBRUARY 9, 1878.

	8	2	8
Bar.	29.40 3	29.600	29.745
Att, therm.	41.0	42.0	42.8
Psychr., dry & wet	35.8 35.8	39.4 37.4	36.6 35.6
No. 4	36.3	40.0	37.3
C. 3235 (wet)	36.6	38.1	36.8
Max., unset & set	53.0 36.4		
Min., " "	30.0 35.7		
Gauge, oz. & inch.	3 7/8 0.342		
Aurora			Cloudy
Zod. light			Cloudy
Wind	4 N	6 N	0 calm
Clouds	10 P a little rain	10 P Fm	10 P

A little rain. Snow in the following night.

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SUNDAY, FEBRUARY 10, 1878.

	8	2	8
Bar.	29.619	29.379	29.408
Att. therm.	39.4	37.9	36.2
Psychr., dry & wet	32.2 32.3	28.7 28.6	21.3 21.7
No. 4	32.7	29.3	22.0
C. 3235 (wet)	33.1	29.1	22.2
Max., — —	41.0 33.6		
Min., — —	32.2 32.2		
Gauge, 0.7 inch.	†0 7/8 0.077		
Aurora,			Cloudy
Zod. light			Cloudy
Wind	6 NE	4 N	6 N
Clouds	10 P snowing.	10 P fine sleet	10 P snowing

† From rain yesterday. About 1½ inches of new snow on the ground. Snow in funnel of raingauge not included in the 0 7/8 ounces.

Snow & sleet during the day.

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MONDAY, FEBRUARY 11, 1878.

	8	2	8
Bar.	29.517	29.577	29.710
Att. therm.	32.4	35.8	28.7
Psychr., dry / wet	21.1 21.4	23.2 20.8	17.0 14.8
No. 4	21.3	24.0	17.8
C. 3235 (wet)	21.8	21.3	15.5
Max., must / wet	33.7 23.4		
Min., " "	15.2 20.8		
Gauge, oz. / inch.	$4\frac{7}{8}$ †0.430		
Aurora			
Zod. light			Moonlight / clouds / Moonlight
Wind	0 calm	6 NNW	6 WNW
Clouds	10 P 7m →	9 Pr 7m →	0 R-Rs

At 8 A.M. new snow apparently about $2\frac{1}{4}$ inches deep. 15 inches in cylinder $1\frac{13}{16}$ inches across weigh $4\frac{7}{8}$ ounces. Hence rainfall to 1 inch of snow 0.2182 inches; total rainfall 0.491 inches. This result probably to be preferred to that from gauge C (0.430 inches).

† See note Feb. 10, and snow measures Feb. 11.

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TUESDAY, FEBRUARY 12, 1878.

	8	2	~~8~~ 7 2/3
Bar.	29,898	29,852	29,843
Att. therm.	26.0	33,8	33.5
Psychr., dry & wet	Below graduation 10,5	25.6 22.0	23,5 21.8
No. 4	11,2	25,9	24,0
C. 3235 (wet)	10,9	22.8	22,6
Max., must & wet	27.3 13.3		
Min., — " —	9.6 10.7		
Gauge, 03 inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 W	6 WSW	5 SSW
Clouds	0 Ro Fm	7 Pr Rs	10 P

Lunar halo 6 3/4 P.M. 36° across.

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WEDNESDAY, FEBRUARY 13, 1878.

	8	2	8
Bar.	29.800	29.750	29.868
Att. therm.	31.0	37.6	36.4
Psychr., dry & wet	23.4 22.6	36.0 31.9	31.9 28.9
No. 4	23.6	36.3	32.2
6-3235 (wet)	23.0	32.8	30.0
Max., must & wet	27.0 25.0		
Min., —"—	10.7 23.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	3 WSW	3 W	4 WNW
Clouds	0 haze	0 7m \	10 P 7m →

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THURSDAY, FEBRUARY 14, 1878.

	8	2 1/4	8
Bar.	30.032	29.976	29.971
Att. therm.	27.3	36.9	30.0
Psychr., dry & wet	13.9 13.7	28.7 25.6	20.8 20.6
No. 4	14.2	29.7	22.0
C. 3235 (wet)	14.0	26.9	21.1
Max., wet & dry	16.7 16.8		
Min., — " —	12.9 13.7		
Gauge, oz. & inch.	0		
Aurora			Moonlight
Zod. light			Moonlight
Wind	1 NNW	0 E	1 NW
Clouds	0 PRs	2 7m	0 P haze

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FRIDAY, FEBRUARY 15, 1878.

	8	2	8
Bar.	30.001	29.953	29.934
Att. therm.	26.0	33.0	34.5
Psychr., dry & wet	Below graduations	31.7 28.0	26.0 25.0
No. 4	9.4	33.4	26.8
6.3235 (wet)	9.3	28.9	26.1
Max., must & set	29.8 12.0		
Min., — " —	7.6 8.8		
Gauge, oz. Inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 NNW	0 calm	0 calm
Clouds	1 R Rs	10 R	10 R

Lunar halo 7¼ to 8 P.M. about 40° across; certainly somewhat larger than the last. For additional remarks, see memoranda at end of this book.

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SATURDAY, FEBRUARY 16, 1878.

	8	2	8
Bar.	29.905	29.896	29.913
Att. therm.	31.2	38.3	35.2
Psychr., dry & wet	23.9 23.1	35.8 †31.2	28.7 27.4
No. 4	24.1	36.6	29.5
C.3235 (wet)	23.8	†32.2	28.3
Max., unset & set	32.4 25.6		
Min., " "	8.8 23.8		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 W	1 WNW	0 calm
Clouds	9 P 7m	0 7m	10 Pn (some stars visible)

† Not frozen

Lemon hole about 7 to 8 P.M. apparently same size as yesterday. Too faint at 8½ P.M. to measure with West equatorial.

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SUNDAY, FEBRUARY 17, 1878.

	8	2	8
Bar.	29.974	29.898	29.799
Att. therm.	32.8	35.9	37.0
Psychr., dry & wet	22.3 21.0	35.9 †31.5	31.9 †31.9
No. 4	22.8	37.3	33.0
6-3235 (wet)	22.3	†33.0	33.0
Max., unst & set	37.0 24.0		
Min., " "	20.7 22.3		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	0 calm	4 S	0 N
Clouds	0 R Large	10 P	10 P, snowing

† Not frozen

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MONDAY, FEBRUARY 18, 1878.

	8	2	8
Bar.	29.844	29.858	29.926
Att. therm.	34.2	37.4	29.9
Psychr., dry & wet	21.8 20.6	25.2 21.5	14.8 12.6
No. 4,	22.4	25.9	15.6
6.3235 (wet)	20.8	22.2	13.0
Max., wet bulb	37.4 23.8		
Min., " "	21.3 21.7		
Gauge, 3. Inch.	$2\frac{5}{8}$ †0.232		
Aurora			
Zod. light			Moonlight ‡
			Moonlight
Wind	6 N	6 N	7 NW
Clouds	6 Pi Rs 7m	0	0

† Snow 2 inches deep $13\frac{1}{2}$ inches in cylinder $1\frac{13}{16}$ inches across weigh $2\frac{1}{2}$ ounces. Hence rainfall to 1 inch of snow 0.124 inches, total rainfall 0.249 inches. This measure preferred to that by gauge C.

‡ At 7½ P.M. vertex near γ Arietis

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TUESDAY, FEBRUARY 19, 1878.

	8	2	8
Bar.	30.124	30.116	30.130
Att. therm.	21.8	31.7	28.7
Psychr., dry & wet	Below graduations	21.6 17.8	18.8 16.0
No. 4	5.8	22.1	19.0
C. 3235 (wet)	6.0	18.2	16.8
Max., mast & set	26.0 8.3		
Min. " "	3.6 5.2		
Gauge, oz. & inch.	0		
Aurora			None
Zod. light			Nearly to Mars
Wind	1 NW	0 calm	1 SW
Clouds	0	0 Fm	0

† At 7¼ P.M. zodiacal light unusually distinct; vertex of cone about 1° below γ Arietis; some appearance of the inner cone described by Jones, the vertex of which was about as high as the south following star in the square of Pegasus.

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WEDNESDAY, FEBRUARY 20, 1878.

	8	2	8
Bar.	30.152	30.079	30.001
Att. therm.	26.8	30.5	32.6
Psychr., dry & wet	17.7 16.4	33.1 30.4	33.2 31.9
No. 4	18.0	34.3	33.8
C. 3235 (wet)	17.1	32.8	32.8
Max., unset & set	24.5 19.6		
Min., " "	5.2 17.2		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 SW	6 SSW	1 SSW
Clouds	8 PRsR 7m—	10 P, a little snow	10 P

Snow beginning at about 12½ P.M.

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THURSDAY, FEBRUARY 21, 1878.

	8	2	8
Bar.	30.018	30.071	30.160
Att. therm.	34.0	35.0	35.0
Psychr., dry & wet	31.9 †31.6	32.4 †31.7	32.9 32.9
No. 4	32.5	33.1	33.7
C. 3235 (wet)	†32.5 B	†32.7	33.8
Max., must & wet	34.7 32.8		
Min., — " —	17.2 31.7		
Gauge, oz. & inch.	0 0.011		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 N	1 NE	6 N
Clouds	10 P; a few drops of rain	10 P raining	10 P; a few drops of rain

† Not frozen

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FRIDAY, FEBRUARY 22, 1878.

	8	2	8
Bar.	30.168	29.964	29.727
Att. therm.	36.0	36.4	37.3
Psych., dry & wet	32.4 32.3	33.9 34.3	37.2 37.7
No. 4	32,8	34,5	38.0
C.3235 (wet)	33.0	35.0	38.5
Max., wet & dry	35.3 33.0		
Min. " "	30.9 32.3		
Gauge, 3 Inch.	4½ 0.397		
Aurora			Cloudy
Zod. light			Cloudy
Wind	7 E	9 E	8 E
Clouds	10 P sleet	10 P raining	10 P raining

At 6⅓ P.M. gauge C 18⅛ ounces ; 1.599 inches

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SATURDAY, FEBRUARY 23, 1878.

	8	2	8
Bar,	29.706	29.738	29.747
Att. therm.	37.6	39.5	40.0
Psychr., dry & wet	34.3 34.4	39.4 38.7	35.5 35.7
No. 4	34.8	40.8	36.3
C. 3235 (wet)	35.0	39.2	36.8
Max., unat & wet	39.3 34.7		
Min., " "	32.1 34.1		
Gauge, 0. Inch. †	8 0.706		
Aurora			Cloudy
Zod. light			Cloudy
Wind	4 N	0 calm	0 calm
Clouds	10 P	10 P	10 P Fog

† At 6½ P.M. Feb. 22 gauge C 1.699 inches
" 8 A.M. " 23 " " 0.706 "
Total 2.305 "

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SUNDAY, FEBRUARY 24, 1878.

	8	2	8
Bar.	29.710	29.721	29.794
Att. therm.	37.7	43.5	41.7
Psychr., dry & wet	34.2 34.4	43.3 37.9	35.1 32.6
No. 4	34,8	43,6	35.8
C. 3235 (wet)	35,0	39.0	33.6
Max., unset Ther	39.9 35.0		
Min., — " —	32.9 34.0		
Gauge, oz. & inch.	0 1/8 0.011		
Aurora			None
Zod. light			To Mars
Wind	2 W	4 WNW	6 W
Clouds	10 P fog	0 Fm	0 P Rs

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MONDAY, FEBRUARY 25, 1878.

	8	2	8
Bar.	29.828	29.724	29.750
Att. therm.	37.3	40.8	39.4
Psychr., dry & wet	34.1 27.8	36.0 †31.4	31.1 27.0
No. 4	31.6	36.8	31.8
C. 3235 (wet)	28.9	†32.0	27.3
Max., must & wet	43.7 32.3		
Min., — " —	29.7 31.1		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	3 NW	5 NW	7 NW
Clouds	8 P Rs R 7m	10 P 7m —	10 P

At 7⅔ A.M.

Uncovered bulb	30.7
Covered "	31.1
No. 4	31.2
C. 3235	31.8

Apparently dry.

† Not frozen

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TUESDAY, FEBRUARY 26, 1878.

	8	2	8
Bar.	29.746	29.722	29.802
Att. therm.	34.3	36.0	38.0
Psychr., dry & wet	27.0 24.4	34.1 †29.5	34.8 29.0
No. 4	27.5	34.7	35.3
C. 3235 (wet)	25.0	30.1	29.7
Max., unset & set	37.3 28.6		
Min., — " —	24.9 27.0		
Gauge, oz. & inch.	0		
Aurora			None
Zod. light			To Mars
Wind	10 NW	12 NW	8 NW
Clouds	9 Pi Fm	1 Pi Rs Fm	0 PRs

† Not frozen

At	7 3/4 A.M.	At 1 5/12 P.M.
Uncovered bulb	26.6	33.5
Covered "	27.0	33.8
No. 4	27.0	34.0
C. 3235	27.7	34.4

Apparently dry

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WEDNESDAY, FEBRUARY 27, 1878.

	8	2	8
Bar.	29.878	29.842	29.843
Att. therm.	35.7	42.3	45.0
Rychr., dry & wet	33.6 †29.0	46.0 36.9	40.4 36.4
No. 4	33.9	46.6	40.9
C. 3235 (wet)	†30.0	38.0	35.5
Max., unset & set	37.4 34.5		
Min., — " —	26.4 33.6		
Gauge, oz. & inch.	0		
Aurora			None
Zod. light			Bright & narrow; vertex between Mars & the Pleiades.
Wind	4 WNW	5 W	4 SW
Clouds	1 RRs 7m	0 Rs	0

† Not frozen

At 7 3/4 A.M.

Uncovered bulb	33.1
Covered "	33.5
No. 11	33.6
C. 3235	34.3

Apparently dry

"Gegenschein" visible at 10 P.M. in Leo, including Regulus. Decidedly dark interval between "t & Cancer. See memoranda at end of book

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THURSDAY, FEBRUARY 28, 1878.

	8	2	8
Bar.	29.909	29.872	29.888
Att. therm.	39.0	45.0	46.4
Psychr., dry / wet	33.8 / †30.3	48.3 / 39.6	42.0 / 36.6
No. 4	33.6	48.7	42.6
C. 3235 (wet)	†32.0	40.5	37.9
Max., must / wet	47.9 / 34.4		
Min., "	31.6 / 33.5		
Gauge, 0.2 inch.	0		
Aurora			None
Zod. light			Bright; not beyond Mizar.
Wind	0 calm	4 W	4 SSW
Clouds	2 B R S	8 B R S	0

† Not frozen

Some appearance of "Gegenschein" at 10¼ P.M., a little lower and further east than yesterday. It did not seem to extend west of Regulus.

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FRIDAY, MARCH 1, 1878.

	8	2	8
Bar.	30.344	30.450	30.449
Att. therm.	37.2	41.4	41.0
Psychr., dry / wet	22.9 / 20.3	30.0 / †24.3	23.8 / 21.4
No. 4	23.5	30.5	24.4
C.3235 (wet)	21.2	25.7	23.2
Max., unset / set	49.0 / 25.0		
Min., — " —	22.2 / 23.0		
Gauge, 2. Inch.	0		
Aurora			
Zod. light			*To Mars: brighter
Wind	6 N	4 NE	3 SE
Clouds	0	0	0

†Not frozen

*Less bright than Athanas Less Minor or Hydra "Gegenschein" at 10½ P.M. somewhat as Feb. 27 but apparently not west of Regulus

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SATURDAY, MARCH 2, 1878.

	8	2	8
Bar.	30.334	30.147	29.976
Att. therm.	34.2	39.0	40.8
Psychr., dry & wet	28.7 27.5	40.4 36.4	38.1 37.0
No. 4	29.1	40.8	38.8
6-3235 (wet)	28.1	37.5	38.0
Max., must & wet	31.0 30.0		
Min., — " —	21.2 28.4		
Gauge, 0.3 inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 SSW	4 SSW	5 S
Clouds	9 RRs Fm	9 RRs Fm	10 P

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SUNDAY, MARCH 3, 1878.

	8	2	8
Bar.	29.495	29.252	29.244
Att. therm.	42.1	43.8	45.1
Psychr., dry & wet	47.0 47.4	50.5 50.5	45.6 45.4
No. 4	47.3	50.9	46.3
C. 3235 (wet)	48.0	51.1	46.2
Max., must & wet	47.0 46.4		
Min., " "	28.7 46.6		
Gauge, 3. Inch.	4 0.354		
Aurora			
Zod. light			Cloudy
			To Mars; among clouds
Wind	5 SSW	7 S	3 SSW
Clouds	10 P 7m 1	10 Pm	5 P

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MONDAY, MARCH 4, 1878.

	8	2	8
Bar.	29.133	29.319	29.598
Att. therm.	43.0	45.0	39.2
Psychr., dry & wet	40.8 40.4	40.0 35.6	28.8 25.7
No. 4	41.2	40.7	29.3
C. 3235 (wet)	41.1	36.3	26.4
Max., must & wet	50.5 41.2		
Min. " "	36.8 40.7		
Gauge, 0 & inch.	1 1/4 0.110		
Aurora			
Zod. light			Cloudy Perceptible among clouds
Wind	4 WSW	11 NW	11 NW
Clouds	7 Pm 7m	7 Pm M 7m →	5 P

At 6¼ P.M. gauge C 0 & ommen.

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TUESDAY, MARCH 5, 1878.

	8	2	8
Bar.	30.031	30.018	30.213
Att. therm.	33.8	39.2	39.0
Psychr., dry & wet	24.0 21.6	35.2 ‡29.8	31.4 ‡28.5
No. 4	24.4	35.7	32.2
6.3235 (wet)	22.0	‡30.5	‡31.0
Max., must & wet	43.0 25.8		
Min., —"—	22.1 23.9		
Gauge, oz. & inch.	†0		
Aurora			None
Zod. light			§ To Mars
Wind	6 NW	5 WNW	0 S
Clouds	0	0	0

† At 6¼ P.M. March 4 0.011 inches

‡ Not frozen

§ Less bright than Less Minor; perhaps no brighter than Hydra

	At 7¾ A.M.	At 1 P.M.
Uncovered bulb	23.6	33.5
Covered "	24.1	33.7
No. 4	24.0	33.8
6.3235	24.8	34.0

Apparently dry

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WEDNESDAY, MARCH 6, 1878.

	8	2	8
Bar.	30.266	30.195	30.149
Att. therm.	35.2	40.9	43.1
Rychr., dry & wet	34.8 33.8	46.4 42.5	40.0 39.1
No. 4	35.1	46.8	40.8
C. 3235 (wet)	34.9	43.3	40.0
Max., wet & dry	37.6 35.9		
Min., " "	23.8 34.7		
Gauge, oz. & inch.	0		
Aurora, Zod. light			None To Mars
Wind	2 S	10 SSW	3 SSW
Clouds	9 Pr	10 Pr Fm	0 haze

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THURSDAY, MARCH 7, 1878.

	8	2	8
Bar.	29.968	29.850	29.898
Att. therm.	41.7	46.8	49.1
Psychr., dry & wet	39.5 39.9	59.9 52.9	49.8 47.9
No. 4	39.9	59.8	50 5
C. 3235 (wet)	40.9	54.0	49.0
Max., unset & set	49.0 40.3		
Min., — " —	34.6 39.2		
Gauge, oz. & inch.	0		
Aurora, Zod. light			Cloudy † Cloudy
Wind	0 calm	0 W	0 SW
Clouds	9 P fog	9 P 7m /	9 P

A little rain in the afternoon
Clear towards midnight.

† At about 11 P.M. Leo decidedly brighter than Virgo.

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FRIDAY, MARCH 8, 1878.

	8	2	8
Bar.	30.142	30.209	30.280
Att. therm.	47.7	50.5	52.4
Psychr., dry & wet	42.6 40.2	56.6 46.3	49.7 42.9
No. 4	42.6	59.0	50.2
C. 3235 (wet)	41.4	47.0	45.0
Max., unset & set	61.2 43.3		
Min., — " —	39.1 42.2		
Gauge, oz. & inch.	0 1/4 0.022		
Aurora			
Zod. light			Moonlight † Moonlight & clouds
Wind	1 SW	5 NW	0 S
Clouds	0 haze	0	0 Rs

† At 10½ P.M. some indication of "Gegenschein" reaching eastwards very nearly to β Virginis, westwards not beyond δ Leonis.

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SATURDAY, MARCH 9, 1878.

	8	2	8
Bar.	30,473	30.489	30.458
Att. therm.	45,8	49,6	50,8
Psychr. dry & wet	40.0 35.5	47.2 40.7	39.2 36.4
No. 4	40,2	47.1	39,8
C. 3235 (wet)	36.8	41.8	38.0
Max. unset & set	59.0 41.0		
Min. — " —	37.2 39.9		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	0 N	4 E	3 SE
Clouds	6 Pi Rs haze	1 haze	0

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SUNDAY, MARCH 10, 1878.

	8	2	8
Bar.	30.194	30.065	30.073
Att. therm.	43.7	50.7	54.9
Psychr., dry & wet	42.6 37.7	65.9 54.0	57.0 49.9
No. 4	42.8	66.2	57.3
C.3235 (wet)	38.8	55.1	52.0
Max., unset & set	48.6 43.0		
Min., — " —	35.2 42.3		
Gauge, 2. Inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	5 SW	0 W	0 W
Clouds	1 Rs haze	1 PRs haze	5 P haze

Lunar halo at 8 P.M. too indistinct for measurement, but about 46° across, measured roughly with ring on retort-stand.

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MONDAY, MARCH 11, 1878.

	8	2	8
Bar.	30.263	30.295	30.334
Att. therm.	49.0	48.9	46.9
Psychr., dry & wet	39.2 34.6	36.8 32.0	33.1 30.7
No. 4	39.7	37.5	33.9
C. 3235 (wet)	35.9	33.6	32.0
Max., unset & set	66.7 41.0		
Min., — " —	39.0 39.1		
Gauge, 0. Inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	5 E	4 ENE	2 NE
Clouds	10 Pm	10 Pm	10 P raining

At 7 5/6 A.M.

Unscreened bulb	39.2
Covered "	39.7
No. 4	39.7
C. 3235	40.6

Apparently dry

Some rain afternoon & evening, and a little snow before next morning

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1878phae.proj...377...

TUESDAY, MARCH 12, 1878.

	8	2	8
Bar.	30.303	30.270	30,175
Att. therm.	42,5	43,5	43.7
Psychr., dry / wet	34.5 / †31.7	35.4 / 33.4	32.3 / 32.7
No 4	35.1	36.1	33.1
6.3235 (wet)	†32.8	34.9	33.3
Max., unwet / wet	41.0 / 35.8		
Min., — " —	32.1 / 34.8		
Gauge, 3. Inch.	$0\frac{3}{4}$ / 0.066		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	6 E	2 E	2 NE
Clouds	10 P 7m a few snowflakes	10 Rm 7m raining	10 P raining

† Not frozen

At 7½ A.M.

Unwetted bulb	34.5
Wetted "	34.9
No. 4	34.9
6.3235	35.9

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WEDNESDAY, MARCH 13, 1878.

	8	2	8
Bar.	29.661	29.528	29.571
Att. therm.	43.0	44.7	45.2
Psychr., dry & wet	36.7 37.2	41.0 40.5	38.0 37.5
No. 4	37.4	41.2	38.7
C. 3235 (wet)	38.0	41.1	38.5
Max., unset & set	38.2 37.7		
Min., — " —	32.3 36.9		
Gauge, oz. & inch.	15 7/8 1.401		
Aurora			Cloudy
Zod. light			Cloudy
Wind	4 NE	0 calm	0 calm
Clouds	10 Pm raining	10 Pm	10 P

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THURSDAY, MARCH 14, 1878.

	8	2	8
Bar.	29.646	29.662	29.731
Att. therm.	43.8	47.5	48.0
Psychr., dry & wet	38.8 36.7	46.1 40.4	40.8 37.8
No. 4	39.2	46.7	41.3
C.3235 (wet)	37.7	41.1	39.0
Max., must & wet	41.0 39.6		
Min., — " —	35.8 38.7		
Gauge, 3. Inch.	0 7/8 0.077		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	4 W.	3 NNW	1 N
Clouds	2 R Rs Fm	10 Pm Fm →	10 Pm

A little snow in the following night

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FRIDAY, MARCH 15, 1878.

	8	2	8
Bar.	29.900	29.911	30.000
Att. therm.	43.1	47.7	49.0
Psychr., dry & wet	34.7 32.9	45.5 38.4	38.0 33.3
No. 4	35.2	46.1	38.6
C. 3235 (wet)	33.8	39.4	34.2
Max., unset & set	47.0 36.8		
Min., — " —	32.2 34.7		
Gauge, 3. Inch.	0½ 0.044		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	4 NNW	4 NNW	3 NNW
Clouds	9 Pm Pt Rs Fm	5 M Fm	0

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SATURDAY, MARCH 16, 1878.

	8	2	8
Bar.	30.094	30.069	30.044
Att. therm.	41.3	47.0	44.6
Psychr., dry & wet	31.4 †30.0	42.3 35.9	35.4 32.9
No. 4	31.7	42.4	36.2
C. 3235 (wet)	†30.9	37.6	34.7
Max., unst & att	47.3 32.7		
Min., " "	27.8 31.2		
Gauge 3. Bench.	0		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	0 N	0 ESE	4 SE
Clouds	0 haze Rs	0 M Fm haze	0

† Not frozen

	At 7 5/6 A.M.	At 1 5/6 P.M.
Unscreened bulb	30.8	41.4
Covered "	31.3	41.8
No. 4	31.2	41.8
C. 3235	31.9	43.0

Apparently dry

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SUNDAY, MARCH 17, 1878.

	8	2	8
Bar.	30.000	29.930	29.802
Att. therm.	43.3	45.3	45.5
Psychr., dry & wet	37.1 35.8	38.7 36.7	39.3 39.8
No. 4	37.9	39.3	40.0
C. 3235 (wet)	37.0	37.9	40.3
Max., wet & set	44.5 38.5		
Min., — " —	31.2 37.2		
Gauge, 03. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	0 calm	1 NE	8 NE
Clouds	10 Pm	10 Pm 7m	10 Praining

Afternoon & evening raing

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MONDAY, MARCH 18, 1878.

	8	2	8
Bar.			
Att. therm.			
Psychr., dry & wet			
No. 4			
C. 3235 (wet)			
Max., wet & dry			
Min.			
Gauge, 3. Inch.			
Aurora			
Zod. light			
Wind			
Clouds			

Rain & snow

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TUESDAY, MARCH 19, 1878.

	8	2	8
Bar.		29.703	29.700
Att. therm.		45.2	45.9
Psychr., dry & wet		48.0 42.8	41.7 37.6
No. 4		48.7	42.5
C. 3235 (wet)		43.6	
Max., wet & set			
Min., " "			
Gauge, 0. Inch.	$18\frac{1}{8}$	1.600	
Aurora			
Zod. light			Possibly To Pleiades just risen
Wind		6 W	3 SW
Clouds		10 PM 7m	0

Moon

× At 10½ A.M. No snow on the ground.

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WEDNESDAY, MARCH 20, 1878.

	8		2		8	
Bar.	29.695		29.673		29.788	
Att. therm.	41.9		43.3		38.6	
Psychr., dry bulb	38.6	34.6	39.1	32.6	32.6	26.9
No. 4	39.2		39.6		33.1	
C. 3235 (wet)	35.4		33.3		27.6	
Max., unst Ther	41.2	37.7				
Min., " "	29.2	38.7				
Gauge, 0. Inch.	0					
Aurora					None	
Zod. light					To Mars; rather bright	
Wind	5 NW.		10 NW		10 NW	
Clouds	5 Pcu Fm		6 M 7m		0 P	

On scale of 10

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THURSDAY, MARCH 21, 1878.

	8	2	8,50
Bar.	30.032	30.046	30.082
Att. therm	34.0	38.3	35.8
Psychr., dry & wet	22.0 18.6	31.6 23.4	28.4 23.4
No. 4	22.6	31.5	28.5
C. 3235 (wet)	19.0	26.0	30.8
Max., unset & set	42.1 24.3		
Min., " "	20.0 22.0		
Gauge, 3. Inch.	0		
Aurora			
Zod. light			To β Tauri
Wind	6 NW	7 NW	0 NW
Clouds	10 R Rs Fm	5 R Rs Fm	3 Thick Cu

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FRIDAY, MARCH 22, 1878.

	8	2	8
Bar.	30.111	30.024	29.986
Att. therm.	32.2	36.8	38.2
Psychr., dry & wet	26.5 22.6	35.4 27.7	31.3 26.6
No. 4	27.0	35.9	31.7
C. 3235 (wet)	23.0	28.8	28.9
Max., unset & set	33.2 27.2		
Min., — " —	21.5 26.5		
Gauge, 3. Inch.	0		
Aurora			0
Zod. light			To Pleiades
Wind	2 NNW	6 NW	0 NW
Clouds	1 Rs in south	0 Fm in keying	0

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SATURDAY, MARCH 23, 1878.

	8	2	8
Bar.	29.749	29.538	29.493
Att. therm.	36.8	40.8	45.0
Psychr., dry & wet	36.8 32.9	54.6 44.3	46.4 42.0
No. 4	36.9	55.1	47.2
C. 3235 (wet)	33.9	45.1	44.0
Max., unset & set	37.6 37.0		
Min., —"—	26.6 36.3		
Gauge, .3 inch.	0		
Aurora			None
Zod. light			Most to the Pleiades, hazy
Wind	2 SW	11 SW	7 SSW
Clouds	9 PiRs 7m →	10P 7m →	2P haze

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SUNDAY, MARCH 24, 1878.

	8	2	8
Bar.	29.215	28.996	29.168
Att. therm.	42.7	46.0	46.0
Psychr., dry & wet	44.0 42.4	49.9 48.1	31.9 †28.3
No. 4	44.5	50.9	32.6
C. 3235 (wet)	43.0	49.1	†29.2
Max., mist & wet	58.6 44.2		
Min., —"—	36.2 43.8		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			cloudy
			cloudy
Wind	3 S	5 S	15 WNW
Clouds	10 P	10 Bn 7m raining	9 P

† Not frozen

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MONDAY, MARCH 25, 1878.

	8	2	8
Bar.	29.389	29.437	29.631
Att. therm.	32.2	35.0	34.4
Psychr., dry & wet	14.5 11.9	26.3 21.7	24.0 20.7
No. 4	14.7	26.7	24.6
C. 3235 (wet)	12.3	22.3	21.5
Max., must & wet	59.0 18.0		
Min., — " —	11.3 14.2		
Gauge, & Inch.	$0\frac{7}{8}$ 0.077		
Aurora			
Zod. light			Cloudy & Th. Pleiades; clouds
Wind	15 WNW	13 W	8 W
Cloud	1 R 7m	4 R Rs 7m	5 P 7m

Anemometer blown off last night.

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TUESDAY, MARCH 26, 1878.

	8	2	8
Bar.	29.791	29.785	29.881
Att. therm.	32.7	38.8	42.7
Psychr., dry & wet	30.8 27.9	44.0 36.3	36.9 32.6
No. 4	31,0	44.6	37.6
C. 3235 (wet)	28.7	37.1	34.0
Max., inset & wet	31.7 31.8		
Min., — " —	14.2 30.8		
Gauge, 0.3 inch.	0		
Aurora			None
Zod. light			Bright; to the North, Way
Wind	4 W	6 W	0 W
Clouds	0 Pr Cu 7m	3 M 7m	0 P Rs

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WEDNESDAY, MARCH 27, 1878.

	8	2	8
Bar.	29.844	29.674	29.671
Att. therm.	38.2	40.7	42.4
Psychr., dry & wet	36.5 34.1	47.3 43.2	43.0 42.2
No. 4	36.9	48.2	43.9
C. 3235 (wet)	35.1	44.0	43.2
Max., inst & set	44.7 37.4		
Min., — " —	30.7 36.3		
Gauge, 0.5 inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 S	10 S	1 S
Clouds	10 Pm	10 Pm	10 P; a few stars visible

A few drops of rain

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THURSDAY, MARCH 28, 1878.

	8	2	8
Bar.	29.685	29.608	29.611
Att. therm.	44.1	47.0	46.2
Rycker, dry & wet	43.2 42.6	47.5 46.7	39.4 39.8
No. 4	43.8	48.5	40.2
C. 3235 (wet)	43.7	47.9	40.8
Max., must & wet	48.7 43.9		
Min., — " —	36.2 43.0		
Gauge, 0. & inch.	0		
Aurora			cloudy
Zod. light			cloudy
Wind	0 E S E	0 E	0 E
Clouds	10 Pm 7m —	10 Pm fog	10 P raining

Evening somewhat rainy

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FRIDAY, MARCH 29, 1878.

	8	2	8
Bar.	29.708	29.767	29.918
Att. therm.	43.0	44.0	45.9
Rychr., dry & wet	37.4 37.6	44.9 41.9	43.7 39.6
No. 4	37.9	45.4	44.3
C.3235 (wet)	38.2	42.9	40.3
Max., unset & set	54.9 38.0		
Min., — " —	36.8 37.2		
Gauge, 03. Inch.	4½ 0.408		
Aurora			
Zod. light			Cloudy Cloudy
Wind	5 N	6 NNE	5 NNW
Clouds	10 Pm 7m raining	10 Pm 7m L	10 P

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SATURDAY, MARCH 30, 1878.

	8	2	8
Bar.	30.078	30.012	29.999
Att. therm.	41.1	45.4	47.2
Psychr., dry & wet	39.2 34.0	52.7 40.9	40.7 †36.1
No. 4	39.5	52.8	41.7
C. 3235 (wet)	35.0	41.9	†39.2
Max., must & wet	48.2 40.0		
Min., — " —	34.6 39.0		
Gauge, 3. inch.	0		
Aurora			None
Zod. light			To the Milky Way
Wind	8 N	7 N	0 E
Clouds.	0	0 Fm	0 P

†Carefully read; both wetted an hour before, and both evidently wet at the time of observation.

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SUNDAY, MARCH 31, 1878.

	8	2	8
Bar.	29.845	29.736	29.674
Att. therm.	42.3	46.5	45.2
Psychr., dry & wet	38.7 35.3	†45.6 41.2	36.5 ‡34.6
No. 4	39.1	†45.2	37.6
C. 3235 (wet)	36.4	42.0	‡37.0
Max., unset & set	54.0 39.5		
Min., — " —	34.7 38.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			None; some clouds To the Milky Way
Wind	0 WNW	3 E	1 SE
Clouds	9 P 7m	10 R Rm 7m	0 P

† Carefully read
‡ Same remark as yesterday

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MONDAY, APRIL 1, 1878.

	8	2	8
Bar.	29.590	29.567	29.617
Att. therm.	42.0	45.4	46.4
Psychr., dry & wet	38.9 37.5	39.7 37.9	39.9 36.8
No. 4	39.6	40.3	40.8
C. 3235 (wet)	38.1	39.1	38.0
Max., unset Wet	49.9 39.9		
Min., — " —	36.3 38.7		
Gauge, 3. Inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 calm	0 calm	3 NE
Clouds	10 P 7m	10 P 7m	10 P

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TUESDAY, APRIL 2, 1878.

	8	2	8
Bar.	29.644	29.640	29.701
Att. therm.	48.2	49.0	48.7
Psychr., dry & wet	38.2 35.0	45.4 39.6	41.4 36.8
No. 4	38.8	46.2	42.2
C. 3235 (wet)	36.0	41.0	37.8
Max., unset & set	43.5 39.6		
Min., — " —	34.5 38.0		
Gauge, 03. & inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	3 NNW	3 ESE	3 NW
Clouds	10 P Rn Fm	10 Rn	2 P

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WEDNESDAY, APRIL 3, 1878.

	8	2	8
Bar.	29.750	29.752	29.766
Att. therm.	44.4	49.8	49.5
Rycker., dry & wet	42.9 37.7	47.4 40.4	41.8 †38.1
No. 4	43.2	47.8	42.2
C. 3235 (wet)	38.7	42.1	†40.2
Max., must & pit	46.8 43.7		
Min., " "	37.9 42.7		
Gauge, oz. & inch.	0		
Aurora			None
Zod. light			To the Milky Way
Wind	6 NW	5 SE	1 SSE
Clouds	0 Pm Fm	9 Pm Fm	0

† Same remark as March 30

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THURSDAY, APRIL 4, 1878.

	8	2	8
Bar.	29.659	29.505	29.422
Att. therm.	46.0	50.0	50.8
Psychr., dry & wet	43.1 39.7	45.1 41.1	37.7 37.4
No. 4	43.5	45.6	38.4
C. 3235 (wet)	40.8	42.1	38.2
Max., must & wet	50.8 43.8		
Min., — " —	35.6 42.8		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 N	4 E	2 NNE
Clouds	10 Pm	10 Pm Fm	10 P mist

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FRIDAY, APRIL 5, 1878

	8	2	8
Bar.	29.149	29.129	29.172
Att. therm.	43.3	44.8	45.3
Psychr., dry & wet	36.8 36.7	40.9 40.3	40.3 39.9
No. 4	37.3	41.7	40.8
C. 3235 (wet)	37.3	41.0	40.8
Max., wet & dry	46.8 37.5		
Min., "	33.2 36.8		
Gauge, 3. & inch.	$1\frac{3}{8}$ 0.121		
Aurora			Cloudy
Zod. light			Cloudy
Wind	5 N	3 N	3 NW
Clouds	10 P mist	10 P rain a little	10 P a few drops of rain

At $12^{h}\frac{1}{4}$ P.M.
Bar. 29.128
Att th. 44.0

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SATURDAY, APRIL 6, 1878.

	8	2	8
Bar.	29.160	29.164	29.237
Att. therm.	43.2	45.3	46.8
Psychr., dry & wet	37.4 37.4	44.9 42.9	42.9 40.8
No. 4	38.2	45.8	43.5
C. 3235 (wet)	38.3	43.6	41.6
Max., unset & set	42.3 38.2		
Min., " "	36.7 37.5		
Gauge, q. inch.	$1\frac{5}{8}$ 0.143		
Aurora			Cloudy
Zod. light			Cloudy
Wind	2 N	1 S	2 NW
Clouds	10 Pm 7m raining	10 P 7m raining	10 P. little rain

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SUNDAY, APRIL 7, 1878.

	8	2	8
Bar.	29.367	29.394	29.536
Att. therm.	44.1	45.6	46.7
Psychr., dry & wet	36.9 36.9	44.9 42.1	40.5 39.8
No. 4	37.9	45.6	41.4
C. 3235 (wet)	37.7	42.9	40.8
Max., unst & sat	46.3 37.8		
Min., — & —	35.7 37.1		
Gauge, 2. Inch.	2 0.177		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	1 NNW	0 NNW	2 NE
Clouds	10 P raining	10 P 7m	10 P raining

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1878phae.proj . 877 .

MONDAY, APRIL 8, 1878.

	8	2	8
Bar.	29.742	29.894	30.080
Att. therm.	43.9	49.2	49.8
Psychr., dry & wet	44.0 39.8	49.8 41.2	41.1 39.2
No. 4	44.5	49.8	42.1
C.3235 (wet)	40.8	45.1	41.1
Max., unset & set	47.6 44.8		
Min. " "	37.0 43.9		
Gauge, 03. & inch.	0 1/4 0.022		
Aurora			
Zod. light			Moonlight Mr. Moonlight & clouds
Wind	7 N	6 E	0 calm
Clouds	5 Pn Rs 7m	5 Pm 7m Pn	1 Pm 7m

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1878phae.proj.377 .

TUESDAY, APRIL 9, 1878.

	8	2	8
Bar.	30.273	30.239	30.258
Att. therm.	45.6	50.5	50.9
Psychr., dry & wet	42.9 39.8	50.0 43.5	43.0 40.6
No. 4	43.4	50.3	43.7
C. 3235 (wet)	41.0	44.6	42.0
Max., inst & set	55.0 43.7		
Min., — " —	37.2 42.7		
Gauge, & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 E	5 SE	2 SE
Clouds	10 P	9 Pi Rs	9 P Rs Fm

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WEDNESDAY, APRIL 10, 1878.

	8	2	8
Bar.	30.193	30.112	30.063
Att. therm.	46.0	48.8	50.0
Psychr., dry & wet	44.7 42.3	52.0 46.3	46.5 44.6
No. 4	45.1	52.7	47.5
C. 3235 (wet)	43.2	47.5	46.0
Max., unset & wet	51.1 45.0		
Min., — " —	37.1 44.1		
Gauge, 0.5 inch.	0		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	2 SE	1 SE	1 S
Clouds	10 Pm	10 Pm Fm	10 Pa little rain

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1878phae.proj.377 .

THURSDAY, APRIL 11, 1878.

	8	2	8
Bar.	29.896	29.752	29.689
Att. Therm.	47.8	51.1	52.1
Psychr., dry & wet	47.5 46.2	56.5 52.8	47.0 46.3
No. 4	48.2	56.8	47.6
C 3235 (wet)	47.1	53.8	47.2
Max., wet & dry	56.2 48.1		
Min., — " —	43.5 47.2		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 S	0 E	2 S E
Clouds	10 P a little rain	10 Pm 7m P	10 P a little rain

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FRIDAY, APRIL 12, 1878.

	8	2	8
Bar.	29.328	29.324	29.389
Att. therm.	48.9	49.8	50.3
Psychr., dry & wet	43.4 43.6	49.9 46.1	47.8 45.2
No. 4	44.0	50.3	48.1
C. 3235 (wet)	44.1	46.8	46.7
Max., unset & set	60.1 44.0		
Min., — " —	42.4 43.1		
Gauge, 3. inch.	7 0.618		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	6 NNW	12 NW	0 calm
Clouds	10 Pm a little rain	10 P 7m a little rain	9 P 7m

Lunar halo 7½ to 8 P.M.
Measured by two forms of rough dioptric apparatus; results 48°½ and 50°½. These measures were taken at about the brightest parts of the ring, between its outer & inner edges. It was not distinct enough for closer measures.

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SATURDAY, APRIL 13, 1878.

	8	2 3/4	8
Bar.	29.369	29.418	29.563
Att. therm.	47.1	51.4	52.4
Psychr., dry & wet	49.4 43.4	54.8 45 9/10	49.0 42.7
No. 4	49.5	55.0	49.3
C. 3235 (wet)	44.5	46.9	43.8
Max., wet & set	51.0 49.9		
Min., " "	42.7 49.0		
Gauge, oz. & inch.	1 1/2 0.132		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 W	6 WNW	6 W
Clouds	1 Rs haze 7m →	9 Pm M 7m →	8 P 7m

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SUNDAY, APRIL 14, 1878.

	8	2	8
Bar.	29.689	29.718	29.784
Att. therm.	48.3	50.8	51.1
Psychr., dry & wet	47.8 42.5	54.0 45.5	47.3 42.4
No. 4	48.3	54.5	47.9
C. 3235 (wet)	43.2	46.2	43.4
Max., unset & set	56.0 48.3		
Min., — & —	42.0 47.3		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Moonlight & clouds
			Moonlight
Wind	8 NNW	7 NW	6 NW
Clouds	8 Rm 7m	10 Rm M 7m	O P Rs

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MONDAY, APRIL 15, 1878.

	8	2	8
Bar.	29.890	29.939	30.058
Att. therm.	46.6	53.0	54.7
Psychr., dry & wet	46.1 43.1	55.2 47.5	50.0 46.3
No. 4 "	46.6	55.5	50.4
C.6235 (wet)	43.8	48.8	47.3
Max., unset & set	55.8 46.4		
Min., — " —	38.2 45.6		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod.-light			Cloudy
Wind	5 NW	6 SE	0 SE
Clouds	9 Pm 7m	7 Pm 7m	10 Pm 7m

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TUESDAY, APRIL 16, 1878.

	8	2	8
Bar.	30.202	30.218	30.208
Att. therm.	50.0	53.3	53.4
Psychr., dry & wet	46.3 42.3	48.8 43.3	42.0 41.1
No. 4	46.8	49.2	42.8
6.3235 (wet)	43.2	44.7	43.0
Max., inset & set	60.0 46.8		
Min., —"—	42.1 45.8		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	3 ESE	2 SE	0 SE
Clouds	10 Pm 7m	6 Pc M 7m Rs R	6 P 7m

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WEDNESDAY, APRIL 17, 1878.

	8	2	8
Bar.	30.206	30.228	30.251
Att. therm.	47.8	53.6	52.3
Psychr., dry & wet	40.4 39.7	47.6 43.6	43.0 42.2
No. 4	41.0	47.6	44.0
C. 3235 (wet)	40.5	45.0	43.6
Max., inset & set	51.0 41.4		
Min., — " —	37.0 39.9		
Gauge, oz., & inch.	0		
Aurora			
Zod. light			Cloudy Suspected; some hazy clouds & moonlight
Wind	0 calm	2 SE	0 N
Clouds	10 P fog	10 P	2 P 7m

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THURSDAY, APRIL 18, 1878.

	8	2	8
Bar.	30.250	30.200	30.173
Att. therm.	47.3	53.0	55.4
Psychr., dry & wet	47.5 45.4	55.5 49.5	46.2 44.4
No. 4	47.1	55.9	47.0
C. 3235 (wet)	46.0	50.9	46.0
Max., must & set	55.1 47.8		
Min., — " —	38.6 46.8		
Gauge, cy. & inch.	0		
Aurora			
Zod. light			† None; some clouds
			† None; but Milky Way invisible.
Wind	1 SW	6 SE	0 SE
Clouds	1 R 7m haze	0 M 7m	0 P haze

† Zodiacal light & Milky Way both visible at 8½ P.M.

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FRIDAY, APRIL 19, 1878.

	8	2	8
Bar.	29.986	29.867	29.917
Att. therm.	48.1	56.0	59.4
Psychr., dry & wet	48.7 45.0	71.3 55.0	60.5 50.4
No. 4	48.6	71.6	61.2
C. 3235 (wet)	45.9	56.0	52.0
Max., must & set	59.5 49.0		
Min., — " —	39.0 48.2		
Gauge, 07. & inch.	0		
Aurora			
Zod. light			
			Cloudy Perceptible among clouds
Wind	3 SW	5 WNW	0 N
Clouds	0 haze	5 Pm 7m	2 P 7m haze

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SATURDAY, APRIL 20, 1878.

	8	2	8
Bar.	29.975	29.894	29.791
Att. therm.	53.0	57.7	58.6
Psychr, dry & wet	51.9 47.9	56.7 50.5	54.2 51.8
No. 4	52,4	57.3	55.0
C. 3235 (wet)	49.0	51.7	53.0
Max, wet & dry	72.0 52.7		
Min, — " —	43.1 51.7		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 NNE	5 E	2 S
Clouds	9 Pi Rs haze	9 P 7m → haze	10 P a little rain

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SUNDAY, APRIL 21, 1878.

	8	2	8
Bar.,	29.550	29.624	29.794
Att. therm.	55.0	59.6	60.6
Psychr., dry & wet	61.1 55.3	65.6 53.3	53.5 46.9
No. 4	61.1	66.0	54.1
C. 3235 (wet)	55.9	53.9	48.1
Max., wet & set	65.6 60.8		
Min., — " —	57.3 61.0		
Gauge, oz. & inch.	0 1/8 0.011		
Aurora			Cloudy
Zod. light			Suspected among clouds
Wind	5 WSW	11 WNW	7 W
Clouds	0 7m haze	5 M 7m →	0 Pn 7m

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MONDAY, APRIL 22, 1878.

	8	2	8
Bar.	30.026	30.024	30.016
Att. therm.	52.8	57.3	60.8
Psychr., dry & wet	50.7 44.7	63.8 49.5	55.2 51.0
No. 4	50.8	64.7	56.0
C.3235 (wet)	45.8	51.0	52.9
Max., unset & wet	67.6 51.2		
Min., — " —	42.1 50.1		
Gauge, cy. & inch.	0		
Aurora, Zod. light			Cloudy Cloudy
Wind	4 NW	2 W	2 NW
Clouds	0 7m Rs	4 Pt Rs 7m	10 P fog

A little rain in the evening

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TUESDAY, APRIL 23, 1878.

	8	2	8
Bar.	30.126	30.153	30.151
Att. therm.	55.4	54.6	54.0
Rychr., dry & wet	45.5 45.1	46.8 46.2	45.1 44.9
No. 4	46.2	47.4	45.9
C.3235 (wet)	46.3	47.0	45.9
Max., unset & set	66.0 46.2		
Min., — " —	45.3 45.3		
Gauge, oz. & inch.	3¼ 0.287		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 E	4 E	4 E
Clouds	10 Pm raining	10 Pm	10 P mist

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WEDNESDAY, APRIL 24, 1878.

	8	3	8
Bar.	30.078	29.990	29.964
Att. therm.	52.2	53.8	55.0
Psychr., dry & wet	45.5 45.3	51.7 49.5	46.9 46.4
No. 4	45.8	52.7	47.5
C. 3235 (wet)	46.3	50.9	47.3
Max., must & wet	47.8 46.7		
Min., — " —	44.0 45.6		
Gauge, oz. & inch.	2 0.177		
Aurora			Cloudy
Tod. light			Cloudy
Wind	1 E	1 E	1 E
Clouds	10P fog	10P fog	9P

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THURSDAY, APRIL 25, 1878.

	8	2	8
Bar.	29.891	29.848	29.870
Att. therm.	55.1	60.1	61.5
Psychr., dry & wet	62.5 59.7	70.4 64.7	59.5 59.2
No. 4	62.6	70.8	60.1
C. 3235 (wet)	60.0	65.1	59.8
Max., unset & set	62.0 61.1		
Min., — " —	45.0 61.7		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	7 S	14 S SW	4 SE
Clouds	9 Pm Rm Fm	7 Pm M Fm	10 P

A little rain before 5 P. M.; heavy shower later.

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FRIDAY, APRIL 26, 1878.

	8	2	8
Bar:	29.850	29.863	29.910
Att. therm.	60.6	60.0	60.1
Psychr., dry & wet	59.4 58.5	58.8 58.5	54.2 53.6
No. 4	59.6	59.3	54.8
C. 3235 (wet.)	59.0	59.0	54.3
Max., unset & set	72.3 59.0		
Min., — " —	57.9 58.9		
Gauge, oz. Inch.	$6\frac{3}{8}$ 0.563		
Aurora			Cloudy
Zod. light			Cloudy
Wind	S 5	0 calm	E 5
Clouds	10 Pm	10 Pm	10 P

Some rain ~~[illegible]~~ especially near noon

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SATURDAY, APRIL 27, 1878.

	8	2	8
Bar.	30.002	30.019	30.000
Att. therm.	57.5	58.7	58.1
Psychr., dry & wet	56.3 56.2	55.3 55.2	51.5 51.7
No. 4	56.8	55.8	52.1
C. 3235 (wet)	56.8	55.8	52.2
Max., mast & set	62.1 56.8		
Min., —"—	51.3 55.8		
Gauge, oz. & inch.	$3\frac{3}{8}$ 0.298		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 calm	0 E	0 E
Clouds	10 P fog a little rain	10 P fog a little rain	10 P fog raining

Some rain ~~in the forenoon~~ at times.

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1878phae.proj.377

SUNDAY, APRIL 28, 1878.

	8	2	8
Bar.	29.951	29.908	29.834
Att. therm.	55.0	56.1	55.5
Psychr., dry & wet	49.0 49.3	51.1 51.3	48.7 48.9
No. 4	49.5	51.8	49.3
C. 3235 (wet)	50.0	52.0	49.5
Max., mrset & wet	59.0 50.0		
Min., — " —	48.8 48.8		
Gauge, oz. & inch	$8\frac{3}{8}$ 0.739		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	6 ENE	3 ENE	4 NE
Clouds	10 P fog	10 P raining	10 P raining

Frequent showers.

Much wind ~~about in the late~~ night noticed by E. C. P.

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1878phae.proj.0377

MONDAY, APRIL 29, 1878.

	8	2	8
Bar.	29.800	29.850	29.906
Att. therm.	53.9	57.0	56.7
Psychr., dry & wet	53.4 53.3	52.3 52.5	46.6 47.0
No. 4	53.9	53.8	47.4
C. 3235 (wet)	54.0	53.0	47.8
Max., unst & set	53.3 53.3		
Min., —"—	47.2 53.0		
Gauge, 0.5 inch.	7 3/8 0.651		
Aurora, Zod. light			Cloudy Cloudy
Wind	0 calm	0 NE	2 N
Clouds	10 P fog	10 Pm raining	10 P raining

Thunder between 1 & 2 P.M. Lightning and thunder at 2 P.M. Frequent showers. Thunder-shower after 7 P.M.

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TUESDAY, APRIL 30, 1878.

	8	2	8
Bar.	29.914	29.928	29.968
Att. therm.	53.2	54.5	54.6
Rychr., dry & wet	44.7 45.2	49.8 47.9	45.2 45.2
No. 4	45,4	50.5	46.2
C. 3235 (wet)	45.6	48.8	46.0
Max., unset & set	56.8 45.7		
Min., — " —	44.3 44.3		
Gauge, of Rinch.	13 3/4 1.214		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 N	5 N	3 N
Clouds	10 Pm 7m raining	10 Pm 7m	10 P raining

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WEDNESDAY, MAY 1, 1878.

	8	2 1/4	8
Bar.	29.995	29.934	29.928
Att. therm.	51.8	54.3	56.4
Psychr., dry & wet	45.4 44.2	54.3 51.2	47.0 45.5
No. 4	45.8	54.6	47.8
C. 3235 (wet)	45.0	51.9	46.8
Max., must & wet	49.4 45.6		
Min., — " —	42.8 45.0		
Gauge, 3. Inch.	2 0.177		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 N	2 E	2 E
Clouds	10 Pm	10 Rn Fny; sun somewhat visible	9 P 7m

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THURSDAY, MAY 2, 1878.

	8	2	8
Bar.	29.886	29.863	29.871
Att. therm.	53.0	60.4	65.1
Psychr., dry & wet	57.0 54.4	73.5 58.9	59.9 56.2
No. 4	56.5	73.8	60.1
6.3235 (wet)	54.9	60.0	57.2
Max., unset & set	56.3 56.3		
Min., — " —	44.8 56.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			None; clouds † None (Milky Way invisible)
Wind	1 W	2 W	0 calm
Clouds	1 Ro 7m haze	2 Ro 7m P	1 P haze

† Zodiacal light plainly visible at 9 P.M. reaching nearly to α & β Gem.

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FRIDAY, MAY 3, 1878.

	8	2	8
Bar.	29.796	29.746	29.781
Att. therm.	59.0	67.6	68.3
Psychr., dry & wet	65.5 60.4	83.7 69.4	66.3 61.3
No. 4	65.5	84.0	67.3
C. 3235 (wet)	60.9	70.8	62.3
Max., must & wet	74.0 64.5		
Min., " "	54.6 64.6		
Gauge, 03 inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 SW	7 SSW	7 S
Clouds	5 P Rs haze	4 P haze Fm	9 P Fm

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SATURDAY, MAY 4, 1878.

	8	2	8
Bar.	29.812	29.785	29.824
Att. therm.	62.6	68.2	67.5
Psychr., dry & wet	66.0 61.6	79.7 69.3	61.4 59.5
No. 4	66.3	80.1	62.1
C.3235 (wet)	62.1	70.0	60.0
Max., unset & set	83.4 65.3		
Min., —"—	57.1 65.3		
Gauge, cz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	8 SSW	6 SSW	6 SSW
Clouds	4 P haze	9 P Fm	7 P

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SUNDAY, MAY 5, 1878.

	8	2	8
Bar.	29.766	29.649	29.650
Att. therm.	63.6	65.8	64.3
Psychr., dry & wet	63.7 61.5	69.4 62.5	58.5 56.5
No. 4	63.9	70.3	59.0
C. 3235 (wet)	62.0	63.4	57.2
Max., must & wet	80.4 63.1		
Min., —"—	60.1 63.0		
Gauge, cg. Inch.	0 ÷ 0.044		
Aurora			Cloudy
Zod. light			Cloudy
Wind	11 S	16 S.	10 S
Clouds	10 Rm Fm	10 Rm Fm	10 P

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1878phae.proj.0377

MONDAY, MAY 6, 1878.

	8	2	8
Bar.	29.895	29.855	29.886
Att. therm.	57.9	63.9	64.9
Psychr., dry & wet	53.8 50.2	66.6 52.8	57.8 50.2
No. 4 C. 3235 (wet)	54.4	67.5	58.2
Max., unset & set	73.0 54.2		
Min., — " —	46.3 57.9		
Gauge, oz. & inch.	0 1/4 0.022		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	~~NW~~ 0 calm	0 WNW	1 NW
Clouds	10 P haze	10 R(Strm) M 7m	2 P 7m→

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1878phae.proj.0377

TUESDAY, MAY 7, 1878.

	8	2	8
Bar.	29.988	29.908	29.887
Att. therm.	56.6	62.7	64.2
Psychr., dry & wet	56.4 49.7	65.1 53.9	55.3 50.0
No. 4	56.3	66.0	56.0
C. 3235 (wet)	50.8	55.3	53.3
Max., inset & wet	66.9 56.3		
Min., " "	45.1 55.7		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Moonlight Moonlight
Wind	2 N	6 ENE	1 E
Clouds	0 P 7m	6 P 7m	0

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WEDNESDAY, MAY 8, 1878.

	8	2	8 7
Bar.	29.832	29.844	29.861
Att. therm.	57.8	63.6	65.6
Psychr., dry & wet	60.3 51.8	63.2 57.3	53.2 52.5
No. 4	60.3	63.8	55.0
C.3235 (wet)	52.9	58.3	54.1
Max., unset & set	66.8 60.0		
Min., — " —	48.3 59.7		
Gauge, cy. & inch.	0		
Aurora			Twilight
Zod. light			twilight
Wind	3 N	5 SE	0 E
Clouds	1 P 7m haze	0 P haze	1 Rs 7m

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THURSDAY, MAY 9, 1878.

	8	2	8
Bar.	29.832	29.816	29.809
Att therm.	59.1	59.8	60.2
Psychr., dry & wet	52.5 51.7	54.3 52.2	53.4 51.8
No. 4	52.8	55.1	54.1
C. 3235 (wet)	52.5	53.1	52.7
Max., inset & set	68.5 53.5		
Min., — & —	51.2 52.1		
Gauge, 0.5 inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	4 ENE	2 ENE	2 NNE
Clouds	10 P fine rain	10 P	10 Pm

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FRIDAY, MAY 10, 1878.

	8	2	8
Bar.	29.747	29.689	29.736
Att. therm.	56.0	63.3	65.0
Psychr., dry & wet	59.9 51.5	68.3 53.0	57.0 47.4
No. 4	59.9	68.7	57.5
C. 3235 (wet)	52.3	54.2	49.1
Max., unset & set	59.6 59.6		
Min., — " —	51.7 59.1		
Gauge, oz. & inch.	0 1/8 0.011		
Aurora			Moonlight
Zod. light			Moonlight
Wind	5 NW	6 NW	4 W
Clouds	1 Pcu 7m	4 Cu 7m	1 PRs 7m

Cloudy about 10 P.M. A few drops of rain late in the evening

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1878phae.proj...377 .

SATURDAY, MAY 11, 1878.

	8	2	8
Bar,	29.692	29.568	29.704
Att. therm.	57.0	59.9	59.8
Psychr., dry & wet	51.4 43.6	55.7 45.1	48.8 43.3
No. 4	51.7	56.3	49.4
C. 3235 (wet)	44.7	46.0	43.3
Max., unwet & wet	68.8 52.0		
Min., —"—	44.7 50.7		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 W	8 W	2 W
Clouds	0 P R	9 Pm 7m →	9 Pm 7m →

Broken indefinite lunar halo about 9½ P.M.

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1878phae.proj.877.

SUNDAY, MAY 12, 1878.

	8	2	8
Bar.	29.849	29.850	29.913
Att. therm.	53.1	55.7	56.3
Psychr., dry & wet	48.4 41.8	51.8 42.5	47.2 40.9
No. 4	48.7	52.2	47.8
C. 3235 (wet)	42.7	43.8	42.0
Max., unset & set	57.6 49.5		
Min., — " —	39.8 47.6		
Gauge, oz. & inch.	0 0.011		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	3 WSW	6 WSW	2 WNW
Clouds	2 Pm M 7m	10 Pm M 7m →	9 Pm 7m →

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1878phae.proj...877...

MONDAY, MAY 13, 1878.

	8	2	8
Bar.	29.913	29.886	29.951
Att. therm.	51.0	55.0	56.9
Psychr., dry & wet	46.0 40.4	53.0 42.9	47.2 40.8
No. 4	46.5	54.0	48.0
C. 3235 (wet)	41.3	43.9	42.4
Max., mast & set	54.1 47.2		
Min., —"—	37.1 45.4		
Gauge, oz. & inch.	0		
Aurora			Moonlight & clouds
Zod. light			Moonlight & clouds
Wind	4 NW	4 NW	3 NW
Clouds	0 P Rs	10 Pm M 7m ↘	7 Pm 7m

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1878phae.proj . 877 .

TUESDAY, MAY 14, 1878.

	8	2	8
Bar.,	30.028	30.022	30.070
Att. therm.	51.8	55.8	56.8
Psychr., dry & wet	46.2 40.8	53.7 43.9	48.3 42.6
No. 4	47.1	54.4	49.0
C. 3235 (wet)	41.5	44.9	45.2
Max., unset & set	54.1 47.3		
Min., — " —	41.0 45.8		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	6 NW	4 WNW	3 E
Clouds	10 Pm Fm →	10 Pm N Fm →	10 Pm Fm

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1878phae.proj..877.

WEDNESDAY, MAY 15, 1878.

	8	2	8
Bar.	30.050	29.998	29.946
Att. therm.	50.8	55.1	54.8
Psychr., dry & wet	49.0 45.6	48,5 42.5	45.5 41.0
No. 4	49.5	49.0	46.2
6-3235 (wet)	46.8	43.7	42.3
Max., unset & set	54.2 50.0		
Min., — " —	39.1 49.0		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	2 E	6 ENE	3 NE
Clouds	10 Pm M 7m	10 Pm M 7m	10 P

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1878phae.proj.877...

THURSDAY, MAY 16, 1878.

	8	2	8
Bar.	29.886	29.902	29.958
Att. therm.	51.3	53.9	56.8
Psychr., dry & wet	46.9 42.9	52.0 46.3	49.7 46.8
No. 4	47,4	52,4	50,8
C. 3235 (wet)	43,7	47.2	48.4
Max., unset & wet	52.0 48.0		
Min., —"—	41.4 46.6		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	13 N	7 NE	0 S
Clouds	10 Pm M 7m/	10 Pm M 7m/	10 Pm 7m

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1878phae.proj.:877.

FRIDAY, MAY 17, 1878.

	8	2	8
Bar.	30.026	30.026	30.048
Att. therm.	52.0	57.6	59.5
Rychr., dry & wet	50.0 46.3	58.4 48.6	51.7 44.9
No. 4	50.6	58.7	52.6
6.3235 (wet)	47.2	50.2	46.8
Max., unset & set	54.7 50.5		
Min., — & —	40.3 49.2		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 NE	3 E	0 calm
Clouds	9 R	8 Pm N Fmic	5 P Fm

Indistinct fragment of lunar halo about 11 P.M.

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1878phae.proj.0377.

SATURDAY, MAY 18, 1878.

	8	2	8
Bar.	30.091	30.100	30.164
Att. therm.	55.5	59.8	62.0
Rychr., dry & wet	60.8 51.5	64.8 52.6	59.7 49.5
No. 4	60,9	65,5	60,0
C. 3235 (wet)	52.4	54.0	51.3
Max., unset & set	61.6 60.0		
Min., — " —	48.3 59.9		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	2 NW	5 E	0 W
Clouds	0 haze	9 P 7m haze	9 Pm 7m

A few drops of rain about 7 P.M.

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1878phae.proj...877...

SUNDAY, MAY 19, 1878.

	8	2	8
Bar.	30.250	30.305	30.310
Att. therm.	55.3	60.8	62.4
Psychr., dry & wet	59.0 51.2	58.8 49.4	49.5 46.9
No. 4	58.9	58.8	50.8
C. 3235 (wet)	52.2	50.4	49.0
Max., must & wet	68.2 58.2		
Min., " "	43.7 58.0		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	4 NE	6 E	0 calm
Clouds	1 haze	1 P Rs haze	8 P 7m

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1878phae.proj.:877.

MONDAY, MAY 20, 1878.

	8	2	8 1/6
Bar.	30.266	30.247	30.170
Att. therm.	55.0	56.7	56.6
Psychr., dry & wet	52.9 50.2	56.0 51.2	50.2 46.0
No. 4	53.7	57.7	50.8
C. 3235 (wet)	51.2	52.1	47.2
Max., unset & set	65.8 53.5		
Min., — "	42.6 52.4		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	0 SE	3 S	6 S
Clouds	10 P	10 P, 7m; a little rain	10 P

Occasional showers

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1878phae.proj...877...

TUESDAY, MAY 21, 1878.

	8	2	8
Bar.	30.000	29.920	29.894
Att. therm.	53.8	55.6	59.0
Psychr., dry & wet	52.6 49.7	58.3 53.9	53.3 51.4
No. 4	53.0	59.8	54.2
C. 3235 (wet)	50.7	54.7	52.9
Max., must & wet	60.2 54.0		
Min., " "	46.5 52.0		
Gauge, 3. Inch.	0 7/8 0.077		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 S	2 WSW	0 SE
Clouds	10 Pm Fm	10 D	9 Pm Fm

Shower in the evening

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1878phae.proj.:377.

WEDNESDAY, MAY 22, 1878.

	8		2		8	
Bar.	29.900		29.875		29.974	
Att. therm.	55.4		57.8		58.6	
Psychr., dry & wet	54.7	47.8	57.9	46.5	51.1	43.9
No. 4	55.0		58.6		51.9	
C. 3235 (wet)	48.6		47.2		45.0	
Max., must & wet	61.9	55.0				
Min., — " —	49.0	54.0				
Gauge, oz. & inch.	1	0.088				
Aurora					Cloudy	
Zod. light					Cloudy	
Wind	10 NW		11 N		3 NW	
Clouds	2 Rs M 7m \		6 R M 7m \		7 Pm 7m \	

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1878phae.proj...377 .

THURSDAY, MAY 23, 1878.

	8	2	8
Bar.	29.936	29.979	30.029
Att. therm.	53.8	57.0	59.4
Rychr., dry & wet	52.4 46.2	58.3 52.7	56.2 50.3
No. 4	53.1	59.2	56.8
C. 3235 (wet)	~~47.0~~	×58.7	52.6
Max., unset & wet	60.0 53.0		
Min., — " —	45.4 52.0		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	9 NNW	7 NE	2 NNE
Clouds	10 P	10 Pm 7m	10 Pm 7m

× Note May 24, 1878. This is pretty clearly an error for 53.7, as the day was not a damp one, although cloudy.

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1878phae.proj.1877.

FRIDAY, MAY 24, 1878.

	8	2	8
Bar.,	30.050	29.990	29.955
Att. therm.	55.6	59.7	60.9
Rychr., dry & wet	55.8 49.5	57.3 52.0	56.0 51.9
		67	74
No. 4	56.1	57.7	56.3
C. 3235 (wet)	50.6	53.2	53.2
		70	78 56.50
Max., unset & set	61.2 55.8		
Min., — " —	46.7 55.1		
Gauge, & inch.	0		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	6 NE	4 SE	3 ESE
Clouds	1 Pr Rs Fm —	10 P Rs	10 Pm Fm

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1878phae.proj..577.

SATURDAY, MAY 25, 1878.

	8	2	8
Bar.	29.827	29.702	29.685
Att. therm.	56.4	62.9	65.8
Psychr., dry & wet	61.1 56.4	73.0 63.9	62.0 56.3
	72		
No. 4	61.6	73.6	63.7
C. 3235 (wet)	56.8	65.0	57.2
	70		
Max., must & wet	63.0 60.2		
Min., — " —	47.6 59.8		
Gauge, 0. Inch.	0		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	4 WSW	4 E	7 NE
Clouds	4 Pt Rs Fm haze	9 Pt Pm Rs M Fm	9 Pm Fm \ Rs

Lightning in the evening

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1878phae.proj.377.

SUNDAY, MAY 26, 1878.

	8	2	8
Bar.	29.518	29.554	29.548
Att. therm.	60.0	62.7	66.0
Rychr., dry & wet	62.7 58.4	65.5 61.6	62.8 58.3
No. 4	64.1	67.7	63.9
6.3235 (wet)	59.4	62.6	59.3
Max., unset & set	74.9 63.0		
Min., — & —	51.8 62.9		
Gauge, oz. & inch.	0		
Aurora			Twilight
Zod. light			Twilight
Wind	1 E	3 SE	1 NE
Clouds	10 Pm 7m —	9 Pm M 7m —	1 Pm 7m

Showers in the forenoon

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1878phae.proj.0377.

MONDAY, MAY 27, 1878.

	8	2	8
Bar.	29.624	29.622	29.700
Att. therm.	60.0	65.9	68.3
Psychr., dry & wet	65.4 57.8	73.0 58.1	64.3 55.1
No. 4	66.4	73.5	65.0
C.3235 (wet)	58.2	58.9	57.0
Max., unst & wet	71.0 64.0		
Min., " "	53.2 64.3		
Gauge, cu. inch.	1 1/8 0.099		
Aurora			
Zod. light			Twilight & clouds
			Cloudy
Wind	6 WSW	7 WNW	1 WNW
Clouds	1 Pm 7m →	2 M 7m →	3 Pm 7m →

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1878phae.proj . 877 .

TUESDAY, MAY 28, 1878.

	8	2	8
Bar.	29.772	29.760	29.816
Att. therm.	61.1	67.7	68.7
Psychr., dry & wet	65.0 57.0	75.2 61.2	61.7 55.0
No. 4	65.8	75.6	62.4
C. 3235 (wet)	57.5	62.1	56.0
Max., wet & dry	74.2 64.0		
Min., " "	52.2 63.8		
Gauge, 0.5 inch.	0		
Aurora			
Zod. light			Twilight & clouds
			Twilight & clouds
Wind	7 W	6 WNW	1 WNW
Clouds	0	8 Pm M Fm —	7 Pm Fm —

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1878phae.proj...877 .

WEDNESDAY, MAY 29, 1878.

	8	2	8
Bar.	29.878	29.904	29.976
Att. therm.	62.4	67.4	68.7
Rychr., dry	63.5	69.4	62.2
wet	55.7	56.6	53.8
		40	54
No. 4	64.4	70.2	62.9
C. 3235 (wet)	56.1	57.5	55.1
		40	56
Max., must wet	74.8	63.0	
Min., —"—	54.6	†62.8	
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	7 NW	7 NW	0 NW
Clouds	0 P 7m	9 Pm M 7m ⟍ Rs	7 Pm 7m Rs

† Minimum thermometer afterwards disturbed by persons employed in cleaning Observatory. Reset at 67.0 at 9¾ A.M.

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1878phae.proj . 377 .

THURSDAY, MAY 30, 1878.

	8	2	8
Bar.	30.067	30.083	30.066
Att. therm.	61.6	62.0	61.7
Psychr., dry & wet	57.3 52.2	57.4 55.1	53.2 51.8
	68		
No. 4	57.7	58.6	53.8
C. 3235 (wet)	53.2	56.4	52.4
	70		
Max., unset & set	72.2 57.2		
Min. — " —	52.6 56.4		
Gauge, oz. & inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 calm	0 calm	0 calm
Clouds	10 Pm 7m —	10 Pm 7m raining	10 Pm raining

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1878phae.proj.0377 .

FRIDAY, MAY 31, 1878.

	8	2	8
Bar.	30.121	30.157	30.199
Att. therm.	58.7	58.0	58.0
Psychr., dry & wet	51.8 51,2	52.4 52.0	52.3 51,1
No. 4	52,2	53.1	53,0
C. 3235 (wet)	51.9	52.7	51.8
Max., unset & wet	60.4 52.0		
Min., — " —	51.1 51,2		
Gauge, 0. & inch.	3 7/8 0.342		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 NNE	8 NE	6 NE
Clouds	10 Pm 7m L raining	10 Pm 7m L a little rain	10 Pm 7m ←

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1878phae.proj..877.

SATURDAY, JUNE 1, 1878.

	8	2	8
Bar.	30.272	30.288	30.254
Att. therm.	56.1	61.5	64.0
Rychr., dry & wet	60.0 50.7	60.7 51.9	53.9 48.9
No. 4	60.5	61.0	54.5
C. 3235	51.8	52.9	50.0
Max., unst & set	59.5 59.5		
Min., " "	48.8 59.2		
Gage, oz. & inch.	2 1/4 0.199		
Aurora			
Zod light			
Wind	7 E	7 E	2 E
Clouds	1 Pm 7m	1 Pr 7m	0 Rs 7m

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1878phae.proj...877...

SUNDAY, JUNE 2, 1878.

	8	2	8
Bar.	30.202	30.154	30.113
Att. therm.	56.8	63.3	65.7
Rychr., dry & wet	61.2 57.3	64.9 59.8	56.7 56.0
No. 4	61.3	65.2	57.5
C. 3235 (wet)	57.8	60.9	57.0
Max., mst & wet	62.4 61.3		
Min., " "	44.7 60.5		
Gauge, oz. & inch.	0		
Aurora			
Zod. light	⊕		
Wind	5 ENE	5 E	0 calm
Clouds	5 P 7m / haze	10 Pm N 7m	10 Pm fog

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1878phae.proj . 377 .

MONDAY, JUNE 3, 1878.

	8	2	8
Bar.	30.073	30.013	29.968
Att. therm.	61.1	66.8	66.8
Psychr., dry & wet	58.8 57.7	68.5 64.2	59.7 58.6
No. 4	59.2	69.2	60.5
C. 3235 (wet)	58.2	64.9	59.3
Max., unset & set	67.0 59.2		
Min., — " —	55.2 58.6		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	1 NE	5 E	0 calm
Clouds	10 Rn fog	5 Pn Rs M 7m/R	1 P Rs

Aurora strongly suspected among clouds in the north & northeast 9½ to 10 P.M. Much light & some slight appearance of streamers. But the moon had not set.

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1878phae.proj..877.

TUESDAY, JUNE 4, 1878.

	8	2	8
Bar.	29.942	29.848	29.814
Att. therm.	63.0	68.7	71.3
Rychr., dry & wet	65.8 62.9	79.3 68.2	68.4 64.2
No. 4	66.4	80.0	69.2
C. 3235 (wet)	63.4	68.9	65.2
Max., unset & set	72.2 65.0		
Min., " "	56.3 64.9		
Gauge, 0.5 inch.	0		
Aurora			
Zod. light.			
Wind	2 SSW	5 SW	5 SSW
Clouds	9 Cu Fm haze	5 N Fm	10 PRs Fm

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1878phae.proj.0377

WEDNESDAY, JUNE 5, 1878.

	8	2	8
Bar.	29.820	29.794	29.855
Att. therm.	66.0	72.5	68.8
Rychr., dry / wet	69.4 64.1	77.6 63.6	60.4 53.8
No. 4	70.0	78.2	61.0
C.3235 (wet)	64.7	64.2	55.0
Max., unset / set	80.5 68.6		
Min., — " —	59.8 68.4		
Gauge, 0. Inch.	0		
Aurora			
Zod. light			
Wind	2 SW	8 WNW	7 WNW
Clouds	10 P 7m	3 Rs N 7m	1 Pm 7m Rs

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1878phae.proj...377...

THURSDAY, JUNE 6, 1878.

	8		2		8	
Bar.	29.906		29.870		29.921	
Att. therm.	57.4		61.0		62.7	
Psychr., dry & wet	53.7	46.0	63.6	49.4	56.5	45.8
No. 4	55.0		63.8		57.0	
6.3235 (wet)	46.6		50.3		47.3	
Max., wet & set	58.8	54.0				
Min., — —	46.9	52.9				
Gauge, 3. Inch.	0					
Aurora						
Zod. light						
Wind	8	NNW	9	NW	2	NNW
Clouds	0	Fm	0		0	Rs

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1878phae.proj.0377.

FRIDAY, JUNE 7, 1878.

	8	2	8
Bar.	29.996	29.906	29.905
Att. therm.	55.1	61.8	65.0
Psychr., dry & wet	54.9 45.9	68.8 53.4	57.2 49.2
No. 4	56.5	69.0	57.7
C. 3235 (wet)	46.6	54.9	50.7
Max., inset & set	64.6 54.7		
Min., — & —	41.3 53.9		
Gauge, 07 Inch.	0		
Aurora			
Zod. light			
Wind	6 NW	5 WSW	5 SW
Clouds	0 Rs 7m	0 Rs	10 P

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1878phae.proj...377...

SATURDAY, JUNE 8, 1878.

	8	2	8
Bar.	29.852	29.763	29.608
Att. therm.	58.8	64.8	64.2
Psychr., dry & wet	62.3 53.6	68.2 59.4	58.1 57.6
No. 4	63.5	69.7	58.9
6.3235 (wet)	54.9	60.6	58.3
Max., unset & set	69.7 61.8		
Min., —"—	48.6 61.7		
Gauge, 0.3 inch.	0		
Aurora			
Zod. light			
Wind	5 SW	6 S	6 SE
Clouds	9 Pm Fm	10 Pm Fm	10 Pm Fm N raining

Rain after 2½ P.M.

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1878phae.proj.377.

SUNDAY, JUNE 9, 1878.

	8	2	8
Bar.	29.499	29.634	29.768
Att. therm.	62.0	63.5	62.8
Psychr., dry & wet	55.3 54.0	62.9 57.8	56.9 52.5
No. 4	55.9	63.0	57.5
C. 3235 (wet)	54.7	58.3	53.9
Max., unset & set	73.6 55.8		
Min., — " —	54.2 55.0		
Gauge, oz. & inch.	$5\frac{5}{8}$ 0.496		
Aurora			
Zod. light			
Wind	4 N	3 NW	2 NW
Clouds	10 Pm Fm ↓	10 Pm Fm ↘	0 Rs Fm

A few drops of rain about 12½ P.M.

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1878phae.proj...377...

MONDAY, JUNE 10, 1878.

	8	2	8
Bar.	29.792	29.723	29.687
Att. therm.	57.8	58.7	58.2
Rychr., dry & wet	54.0 52.0	51.6 50.0	52.3 48.8
No. 4	54.8	52.0	52.9
C. 3235 (wet)	53.0	50.8	49.7
Max., unset & set	64.2 54.4		
Min., — " —	47.1 54.0		
Gauge, oz. & inch.	0 1/4 0.022		
Aurora			
Zod. light			
Wind	5 E	5 E	5 NE
Clouds	10 Pm 7m — raining	10 Pm 7m — raining	10 Pm

Rain at times.

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1878phae.proj.377.

TUESDAY, JUNE 11, 1878.

	8	2	8
Bar.	29.654	29.692	29.799
Att. therm.	55.7	57.3	58.6
Psychr., dry & wet	51.2 49.1	56.5 51.2	51.8 50.6
No. 4	51.5	57.1	52.8
C. 3235 (wet)	50.0	52.1	52.1
Max., unset & set	55.0 51.9		
Min., — " —	47.8 50.7		
Gauge, oz. & inch.	1 5/8 0.143		
Aurora			
Zod. light			
Wind	6 N	9 NE	1 SE
Clouds	10 Pm 7 fm	10 Pm M 7 fm	10 Pm 7 fm

A few drops of rain

Fragment of lunar halo
9 1/2 to 10 P.M.

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1878phae.proj.0377

WEDNESDAY, JUNE 12, 1878.

	8		2		8	
Bar.	29.892		29.917		29.996	
Att. therm.	57.2		62.5		64.0	
Psychr., dry & wet	60.4	54.8	63.4	60.8	55.0	55.2
No. 4	62.2		63.7		55.4	
6.3235 (wet)	55.0		61.1		56.0	
Max., wet & dry	59.3	59.3				
Min., —"—	46.2	59.0				
Gauge, oz. & inch.	0 1/8	0.011				
Aurora						
Zod. light						
Wind	3 W		1 S W		0 calm	
Clouds	4 P 7m Rs		10 Pm M 7m		10 Rs 7m raining	

Shower about 1 P.M., with some thunder. Other shower after 6 P.M.

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1878phae.proj.:877.

THURSDAY, JUNE 13, 1878.

	8	2	8
Bar.	30.037	30.044	30.102
Att. therm.	58.4	64.3	65.3
Psychr., dry & wet	61.5 56.9	64.6 57.0	61.3 58.2
No. 4	63.0	65.4	61.6
6.3235 (wet)	57.0	58.0	59.0
Max., unset & set	70.8 59.3		
Min., — " —	48.3 60.2		
Gauge, cy. Inch.	$5\frac{3}{8}$ 0.474		
Aurora			
Zod. light			
Wind	4 NNW	4 NE	2 SW
Clouds	4 R Pm 7m — large	10 Pm M 7m V. a little rain	9 Pm M 7m

Slight shower about 2 P.M.

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1878phae.proj...877...

FRIDAY, JUNE 14, 1878.

	8	2	8
Bar.	30.190	30.168	30.146
Att. therm.	59.8	65.9	68.7
Psychr., dry & wet	63.0 57.8	70.8 60.3	62.2 57.3
No. 4	65.0	71.0	63.0
6.3235 (wet)	58.2	61.6	59.2
Max., unset Kael	70.2 62.0		
Min., — " —	49.8 62.0		
Gauge, oz. Inch.	0 1/8 0.011		
Aurora			
Zod. light			
Wind	2 N	5 E	0 calm
Clouds	0 haze	2 M Fm	0 Rs haze

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1878phae.proj . 877 .

SATURDAY, JUNE 15, 1878.

	8	2	8
Bar.	30.129	30.028	30.018
Att. therm.	61.1	67.4	69.0
Psychr., dry & wet	65.0 60.4	79.1 69.0	62.1 59.3
No. 4	67.0	80.5	63.3
6.3235 (wet)	60.4	70.3	60.8
Max., unset & set	71.7 63.6		
Min., — " —	51.2 63.5		
Gauge, oz. & inch.	0		
Aurora, Zod. light			
Wind	4 SW	6 S	3 S
Clouds	1 haze	8 M 7m haze	0 Rs 7m haze

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1878phae.proj.0377

SUNDAY, JUNE 16, 1878.

	8	2	8
Bar.	29.960	29.937	29.935
Att. therm.	62.7	68.2	70.4
Psychr., dry & wet	69.0 63.5	79.4 66.2	67.7 61.3
No. 4	71.7	80.5	68.8
C. 3235 (wet)	63.2	67.0	62.7
Max., unset & set	80.3 67.4		
Min., —"—	53.3 67.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	5 SSW	6 SW	3 SW
Clouds	5 Pc Rs Fm Haze	10 P M Fm	8 Pm Fm

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1878phae.proj . 877 .

MONDAY, JUNE 17, 1878.

	8	2	8
Bar.	29.922	29.907	29.895
Att. therm.	65.2	66.1	69.0
Psychr., dry & wet	63.0 59.7	73.8 68.5	67.5 65.6
No. 4	63.7	74.7	68.0
6.3235 (wet)	60.6	68.9	66.3
Max., unset & set	81.0 63.2		
Min., — " —	60.0 62.9		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	3 S W	5 S W	5 S S W
Clouds	10 Pm Fm → a few drops of rain	9 Pm M Fm /	10 Rm Fm → M

Showers in the forenoon.

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1878phae.proj..377 .

TUESDAY, JUNE 18, 1878.

	8	2	8
Bar.	29.958	29.937	29.910
Att. therm.	65.8	67.1	67.7
Psychr., dry & wet	65.4 60.7	68.3 63.3	61.9 60.0
No. 4	65.7	69.8	62.9
6.3235 (wet)	61.3	63.7	61.5
Max., unset & set	74.6 65.1		
Min. 1 — " —	60.2 64.4		
Gauge, 3. & inch.	2 7/8 0.254		
Aurora			
Zod. light			
Wind	3 SW	1 SW	0 SW
Clouds	10 Pm 7m —	10 Pm 7m /	10 P 7m

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1878phae.proj.0377

WEDNESDAY, JUNE 19, 1878.

	8	2	8
Bar.	29.917	29.886	29.886
Att. therm.	63.3	69.1	72.2
Psychr., dry & wet	66.6 60.0	75.4 61.3	64.9 58.4
No. 4	68.1	75.7	65.9
C. 3235 (wet)	60.3	63.0	59.9
Max., unst & set	70.7 65.8		
Min., — " —	54.8 65.7		
Gauge, 0. Inch.	0 8 0.011		
Aurora			
Zod. light			
Wind	4 NNW	3 NE	0 NE
Clouds	0 haze	10 fm haze	1 Ri Ci haze

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1878phae.proj..877.

THURSDAY, JUNE 20, 1878.

	8	2	8
Bar.	29.881	29.850	29.834
Att. therm.	64.8	70.8	73.5
Psychr., dry & wet	68.7 59.5	76.4 60.6	69.2 60.5
No. 4	69.6	77.1	69.9
C. 3235 (wet)	60.1	62.1	63.0
Max., unst & wet	77.0 67.8		
Min., " "	55.2 67.7		
Gauge, 03 inch.	0		
Aurora			
Zod. light			
Wind	6 N	4 E	2 S E
Clouds	0 haze	0 haze	1 P R S 7m haze

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1878phae.proj.0377

FRIDAY, JUNE 21, 1878.

	8	2	8
Bar.	29.850	29.850	29.926
Att. therm.	66.8	72.8	73.7
Psychr., dry & wet	72.2 64.3	83.3 68.1	67.0 57.5
No. 4	73.3	84.3	67.7
C. 3235 (wet)	65.0	69.3	59.3
Max., unset & set	78.8 71.0		
Min., — " —	57.2 71.0		
Gauge, 3. Inch.	0		
Aurora			
Zod. light			
Wind	2 SE	7 S	6 S
Clouds	8 P haze	9 P haze 7m	10 P

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1878phae.proj.:877.

SATURDAY, JUNE 22, 1878.

	8	2	8
Bar.	29.945	29.926	29.822
Att. therm.	66.2	68.6	67.1
Psychr., dry & wet	67.2 61.7	61.5 59.5	61.2 60.8
No. 4	67.8	62.0	61.6
6.3235 (wet)	62.5	60.0	61.4
Max., inset & wet	84.0 67.2		
Min., —"—	54.7 66.8		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	5 E	4 E	6 E
Clouds	6 Pr Pm Rs 7m	10 Prainmy	10 P fog

Showers after noon, some heavy ones.
At 6 P.M. gauge C 9 1/8 ounces.

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1878phae.proj.377.

SUNDAY, JUNE 23, 1878.

	8	2	8
Bar.	29.900	29.887	29.865
Att. therm.	66.6	72.7	73.8
Psychr., dry & wet	69.2 67.6	77.6 70.1	69.4 66.4
No. 4	70.0	78.1	70.0
C. 3235 (wet)	67.9	70.7	68.2
Max., unset & set	70.3 67.5		
Min. " "	58.6 67.8		
Gauge, oz. & inch.	*0½ 0.044		
Aurora			
Zod. light			
Wind	3 S	6 E	0 calm
Clouds	10 Pm M 7m	5 M 7m	10 Pm 7m

*At 6 P.M. June 22 gauge C 0.872 inches.
" 8 A.M. " 23 " " 0.044 "
Total 0.916 "

Slight showers after noon.

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1878phae.proj...377...

MONDAY, JUNE 24, 1878.

	8	2	8
Bar.	29.844	29.802	29.780
Att. therm.	67.2	71.4	72.3
Psychr., dry & wet	69.4 64.0	74.9 65.6	× 66.6 × 64.0
No. 4	71.7	76.0	× 67.3
C. 3235 (wet)	64.0	66.6	× 65.0
Max., unset & wet	78.6 68.3		
Min., " "	57.2 67.9		
Gage, 3. Inch.	6 1/4 0.011		
Aurora			
Zod. light			
Wind	4 SW	7 SW	4 SW
Clouds	1 P Rs Fm	9 Pm M Fm →	3 Pm M Fm

Slight showers after noon.

× At 8 1/4 P. M.

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1878phae.proj.377.

TUESDAY, JUNE 25, 1878.

	8	2	8
Bar.	29.732	29.728	29.790
Att. therm.	67.5	72.0	72.8
Psychr., dry & wet	67.9 64.5	74.4 60.1	67.3 58.8
No. 4	68.8	75.0	67.7
6.3235 (wet)	64.6	60.8	58.0
Max., unset & set	77.1 67.2		
Min., — " —	59.8 66.8		
Gauge, oz. & inch.	1¼ 0.110		
Aurora			
Zod. light			
Wind	6 W	8 WNW	1 WNW
Clouds	8 Pm 7m →	5 M 7m haze	0 Ro

Slight shower early.

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1878phae.proj..377.

WEDNESDAY, JUNE 26, 1878.

	8	2	8
Bar.	29.984	30.003	30.072
Att. therm.	64.0	67.8	71.8
Psychr., dry / wet	59.8 / 51.7	72.9 / 56.5	66.8 / 55.6
No. 14	60.9	73.3	67.6
6.3235 (wet)	52.1	57.4	58.0
Max., unset / set	76.0 / 59.9		
Min., —"—	52.9 / 59.0		
Gauge, oz. / inch.	0		
Aurora			
Zod. light			
Wind	7 NW	6 NW	0 WNW
Clouds	2 Rs haze	1 PRs 7m	1 Rs Pm in brigs

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1878phae.proj.377.

THURSDAY, JUNE 27, 1878.

	8	2	8
Bar.	30.128	30.080	30.102
Att. Therm.	64.6	73.2	77.2
Psychr., dry & wet	70.0 62.7	87.8 73.1	76.5 66.5
No. 41	72.3	89.0	77.2
C. 3235 (wet)	62.9	73.7	67.2
Max., unset & set	74.7 68.8		
Min., — " —	52.8 68.5		
Gauge, cu. inch.	0		
Aurora			
Zod. light			
Wind	1 W	9 SW	7 WSW
Cloud	4 Pm 7m haze	5 P 7m haze	10 Pm 7m

A little rain in the evening; also lightning without thunder.

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1878phae.proj..377.

FRIDAY, JUNE 28, 1878.

	8	2	8
Bar.	30.111	30.108	30.126
Att. therm.	71.2	77.3	78.6
Psychr., dry & wet	76.0 69.0	82.7 70.7	74.7 66.8
No. 4	78.0	83.9	75.2
6. 3235 (wet)	69.0	71.7	68.3
Max., unset & set	88.6 75.4		
Min., — " —	64.0 75.1		
Gauge, oz. & inch.	0 1/4 6.022		
Aurora			
Zod. light			
Wind	S W N W	S N W	O E
Clouds	O P Rs	10 Pm M 7m ↘	6 Pm M 7m ↓

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1878phae.proj.377.

SATURDAY, JUNE 29, 1878.

	8	2	8
Bar.	30.182	30.168	30.146
Att. therm.	72.7	78.3	80.3
Psychr., dry & wet	76.4 70.5	82.9 69.7	74.3 68.4
No. 4	78.0 70.8	83.6	75.0
6.3235 (wet)		71.0	70.0
Max., unset & set	83.8 75.7		
Min., — " —	64.6 75.5		
Gauge, 03. 8inch.	0		
Aurora			
Zod. light			
Wind	4 N	2 E	0 calm
Clouds	0 haze	0 M Fm haze	0 P Rs

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1878phae.proj...177...

SUNDAY, JUNE 30, 1878.

	8	2	8
Bar.	30.148	30.127	30.121
Att. therm.	74.0	80.0	83.4
Psychr., dry & wet	79.8 73.9	88.6 75.5	79.8 74.0
No. 4	81.8	89.3	81.0
C. 3235 (wet)	73.9	76.7	75.4
Max., unset & set	83.3 78.6		
Min., " "	66.6 78.6		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	1 E	6 E	3 SE
Clouds	1 Rs Fm haze	3 M Rs Fm	0 Rs Fm Rs

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1878phae.proj.:877.

MONDAY, JULY 1, 1878.

	8	2	8
Bar.	30.116	30.082	30.062
Att. therm.	76.8	82.9	84.4
Psychr., dry & wet	81.0 74.1	94.2 75.7	79.3 74.0
No. 4	83.0	95.4	80.6
C.3235 (wet)	74.3	77.5	75.2
Max., unset & set	91.0 80.0		
Min., — " —	64.9 79.9		
Gauge, 24 hours	0		
Aurora			
Zod. light			
Wind	0 SW	3 S V	2 S
Clouds	0 Fm haze	5 Pm M Fm haze	2 P Fm haze

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1878phae.proj.:877.

TUESDAY, JULY 2, 1878.

	8	2	8
Bar.	30.062	30.044	30.053
Att. therm.	77.3	83.8	85.2
Psychr., dry & wet	81.3 74.3	92.8 75.6	82.3 75.3
No. 4	83.2	94.0	83.2
C. 3235 (wet)	74.5	76.3	77.0
Max., unset & set	94.8 80.2		
Min., —"—	68.2 80.0		
Gauge, 3. Inch.	0		
Aurora			
Zod. light			
Wind	3 SW	2 SW	2 SW
Clouds	1 P Fm haze	3 M Fm	7 Pm Fm

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1878phae.proj.377.

WEDNESDAY, JULY 3, 1878.

	8	2	8
Bar.	30.096	30.095	30.109
Att. therm.	78.8	84.2	86.3
Psychr., dry & wet	82.6 74.0	93.8 75.3	82.3 74.7
No. 4	84.7	94.5	83.1
6. 3235 (wet)	74.3	76.7	75.5
Max., unset & set	94.0 81.9		
Min., — " —	70.0 81.5		
Gauge, 03. & inch.	0		
Aurora			
Zod. light			
Wind	2 SW	3 SW	4 SW
Clouds	0 Fm Haze	1 M Fm Haze	1 P Fm

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1878phae.proj..377.

THURSDAY, JULY 4, 1878.

	8		2		8	
Bar.	30.172		30.162		30.094	
Att. therm.	79.3		82.2		81.3	
Psychr., dry & wet	76.6	68.2	78.4	69.3	72.3	68.0
No. 4	77.2		79.0		73.3	
C. 3235 (wet)	68.8		70.7		69.0	
Max., unset & set	93.8	76.4				
Min., " "	71.5	76.0				
Gauge, & inch.	0					
Aurora						
Zod. light						
Wind	7 NE		4 S E		0 calm	
Clouds	4 P R 5 fm haze		9 P haze 7 m		10 P 7 m	

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1878phae.proj.:377.

FRIDAY, JULY 5, 1878.

	8	2	8
Bar.	29.955	29.882	29.908
Att. therm.	76.8	83.5	83.4
Psychr., dry & wet	79.4 68.8	88.7 70.3	75.9 60.0
No. 4	80.3	89.3	76.3
C. 3235 (wet)	68.9	70.8	61.0
Max., unst & set	80.3 76.5		
Min., — " —	69.0 77.2		
Gauge, 3. Inch.			
Aurora			
Zod. light			
Wind	2 NW	11 NW	9 NNW
Clouds	1 PRs 7m	5 PM 7m \ huge	1 P 7m

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1878phae.proj..377.

SATURDAY, JULY 6, 1878.

	8	2	8
Bar.	30.003	29.964	30.026
Att. therm.	72.5	75.7	76.6
Psychr., dry & wet	69.9 61.1	72.3 57.4	64.3 †56.2
No. 4	71.7	72.9	65.2
C. 3235 (wet)	61.6	59.0	†59.0
Max., unset & set	89.4 69.5		
Min., " — "	57.0 68.7		
Gauge, 2. Inch.	0		
Aurora			
Zod. light			
Wind	1 NW	7 E	0 SE
Clouds	4 haze	6 haze	3 P Fm haze

† Wetted 20 minutes before; both evidently wet when observed.

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1878phae.proj.377.

SUNDAY, JULY 7, 1878

	8	2 1/4	8
Bar.	30.061	30.002	29.974
Att. therm.	68.6	74.8	78.0
Rychn., dry & wet	67.0 61.5	82.9 65.6	73.4 66.0
No. 14	68.5	84.0	74.3
C. 3235 (wet)	61.9	66.8	67.9
Max., unset & wet	77.9 66.6		
Min., — " —	52.6 66.0		
Gauge, 03 inch.	0		
Aurora			
Zod. light			
Wind	4 SW	5 SW	4 SW
Clouds	5 haze	6 haze	7 P 7m

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1878phae.proj.:377.

MONDAY, JULY 8, 1878.

	8	2	8 1/4
Bar.	29.998	29.980	29.979
Att. therm.	73.2	80.9	81.3
Rydr., dry & wet	78.0 67.9	92.7 74.7	78.9 72.7
No. 4	79.3	93.8	79.8
C. 3235 (wet)	68.5	75.6	73.7
Max., unset & set	83.2 77.0		
Min., " "	66.0 77.1		
Gauge, 07. Inch.	0		
Aurora			
Zod. light			
Wind	2 SW	6 SW	2 SW
Clouds	2 haze	5 P 7m haze	4 Pm 7m

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1878phae.proj.0377

TUESDAY, JULY 9, 1878.

	8	2	8
Bar.,	29.972	29.944	29.984
Att. therm.	78.2	83.7	82.0
Psychr., dry / wet	77.6 / 72.3	91.2 / 78.5	73.7 / 72.7
No. 4	78.5	92.0	73.7
C-3235 (wet)	72.8	79.0	73.2
Max., unset / set	93.8 / 77.8		
Min., " / "	73.8 / 77.2		
Gauge, 24 inch.	0		
Aurora			
Zod. light			
Wind	7 SW	7 SW	6 S S W
Clouds	8 Pm 7m →	8 Pm M 7m →	9 Pm 7m ↗

Heavy thunder-shower 3½ to 4¼ P.M. Some rain before (as early as 2½ P.M.) and some later. Lightning seen only as a glare in clouds, thunder nearly continuous, so that flashes and claps could seldom be connected. Following times noted.

Lightning			Thunder		
3	53m	12s	3	58m	14s
	54	52		59	59
	56	26		56	31
	56	41		58	54
4	5	24	4	5	30
	6	42		6	44

by clock B. 3941.

Observations rough.

At 5½ P.M. gauge C 25¼ ounces

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1878phae.proj...177.

WEDNESDAY, JULY 10, 1878.

	8	2	8
Bar.	30.001	29.935	29.973
Att. Therm.	77.0	82.0	80.5
Psychr., dry & wet	79.9 75.4	89.5 78.9	71.1 69.0
No. 4	81.6	90.1	72.0
6.3235 (wet)	75.5	79.6	69.8
Max., wet & set	91.4 78.0		
Min., " "	70.6 78.8		
Gauge, 3. Inch.	+0		
Aurora			
Zod. light			
Wind	5 SW	6 SSW	6 SW
Clouds	5 Pm Fm — Rs	8 Pm M Fm — Pm Rs	3 Pm M Fm —

+ July 9, 5½ P.M. 2.217 inches.

Shower with a little thunder beginning 5 h 1/12 P.M.

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1878phae.proj.:177.

THURSDAY, JULY 11, 1878.

	8	2	8
Bar.	30.185	30.202	30.211
Att. therm.	75.4	79.8	80.1
Psychr., dry & wet	73.5 66.0	78.9 67.3	72.5 66.4
No. 4	74.5	79.6	73.3
6.3235 (wet)	67.1	68.5	67.5
Max., moist & wet	90.1 73.2		
Min., — " —	65.3 72.9		
Gauge, oz. & inch.	2½ 0.221		
Aurora			
Zod. light			
Wind	1 N	6 SE	7 SSW
Clouds	7 Pm 7m →	4 Pm M 7m ↘	10 Pm 7m ↓

Rain in the evening.

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1878phae.proj..377.

FRIDAY, JULY 12, 1878.

	8	2	8
Bar.	30.275	30.214	30.116
Att. therm.	75.2	78.7	78.2
Psychr., dry & wet	71.2 63.2	75.2 67.0	69.7 66.2
No. 4	71.9	77.0	70.6
C. 3235 (wet)	64.1	69.0	67.2
Max., wet & dry	82.9 70.0		
Min., " "	65.5 70.9		
Gauge, oz. & inch.	4¼ 0.375		
Aurora			
Zod. light			
Wind	3 ENE	1 SE	1 S
Clouds	4 Bn Fm Haze	10 P Fm haze	10 Bn Fm; a little rain.

Slight showers after 3 P.M.

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1878phae.proj.377.

SATURDAY, JULY 13, 1878.

	8	2	8
Bar.	30.052	30.048	30.028
Att. therm.	74.0	75.8	76.3
Psychr., dry & wet	65.0 63.8	72.9 66.7	65.5 62.9
No. 4	65.4	73.6	66.4
6.3235 (wet)	64.3	67.8	64.6
Max., unset & set	78.3 66.4		
Min., " "	64.3 64.9		
Gauge, oz. & inch.	0 1/4 0.022		
Aurora			
Zod. light			
Wind	3 ENE	4 ESE	0 SE
Clouds	10 Pm fog	5 Pm M 7m L	0 PRs haze

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1878phae.proj...377...

SUNDAY, JULY 14, 1878.

	8	2	8
Bar.	29.967	29.854	29.833
Att. therm.	70.6	76.5	78.8
Psychr., dry / wet	69.6 / 66.7	84.4 / 69.8	76.7 / 71.4
No. 4	70.2	84.8	77.6
6.3235 (wet)	67.0	70.2	72.2
Max., mst / dst	74.2 / 69.3		
Min., " "	59.5 / 68.7		
Gauge, 03 Inch.	0		
Aurora			
Zod. light			
Wind	6 SW	8 WSW	3 SW
Clouds	9 Pm Fm ↗	0 M Fm	9 Pm Fm →

A little rain in the evening.

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1878phae.proj . 877 .

MONDAY, JULY 15, 1878.

	8	2	8
Bar.	29.944	30.043	30.102
Att. therm.	75.0	77.0	73.2
Psychr., dry / wet	72.0 67.3	64.5 57.8	60.9 57.2
No. 4	72.7	65.0	61.4
C. 3235	67.8	58.9	58.9
Max., must / set	84.6 72.0		
Min., — " —	66.9 71.4		
Gauge, oz. / inch.	0 1/4 0.022		
Aurora			
Zod. light			
Wind	6 NE	7 E	4 ESE
Clouds	9 Bm Fm ⟋	9 P Fm →	5 P Fm ⟍

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1878phae.proj..377.

TUESDAY, JULY 16, 1878.

	8	2	8
Bar.	30.167	30.127	30.102
Att. therm.	68.0	73.4	74.4
Psychr., dry / wet	64.0 60.5	71.8 62.8	65.9 62.1
No. 4	64.7	72.1	66.9
C. 3235	61.0	64.0	63.1
Max., unset / set	72.1 64.5		
Min., —"—	53.0 63.3		
Gauge, of Rain	0		
Aurora			
Zod. light			
Wind	1 SE	3 SE	6 S
Clouds	5 Ks M Fm	9 P Rm →	8 P Fm

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1878phae.proj.:377.

WEDNESDAY, JULY 17, 1878.

	8	2	8
Bar.	30.064	29.949	29.846
Att. therm.	69.1	73.8	74.8
Psychr., dry & wet	67.4 63.5	75.4 70.3	72.7 69.2
No. 4	68.5	76.4	73.2
C. 3235 (wet)	64.0	71.0	69.8
Max., unset & set	75.3 67.8		
Min., — " —	61.2 67.0		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	7 SSW	4 SW	7 SW
Clouds	8 P 7m — haze	10 P a little rain	10 P Rs 7m Sm 1/1

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1878phae.proj.1877.

THURSDAY, JULY 18, 1878.

	8		2		8	
Bar.	29.803		29.807		29.854	
Att. therm.	74.0		80.7		82.8	
Psychr., dry bulb	80.2	76.6	90.5	77.0	82.8	72.3
No. 4	81.1		91.6		83.5	
C. 3235 (wet)	77.0		77.8		73.6	
Max., wet bulb	79.7	79.7				
Min., "	67.0	79.4				
Gauge, oz. & inch.	0 5/4	0.055				
Aurora						
Zod. light						
Wind	2 W		9 NW		0 calm	
Clouds	H P Rs haze		6 Pm M Fm Rs		10 Pm Fm	

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FRIDAY, JULY 19, 1878.

	8	2	8
Bar.	29.839	29.810	29.887
Att. therm.	78.7	82.9	86.7
Psychr., dry & wet	81.5 74.9	90.8 76.7	81.1 70.2
No. 4	82.5	91.6	82.0
C. 3235 (wet)	76.0	77.8	71.5
Max., must & wet	91.4 81.0		
Min., " "	74.2 80.8		
Gauge, 0.3 inch.	0		
Aurora			
Zod. light			
Wind	0 S W	3 W	4 N
Clouds	10 Pm Fm →	3 M Fm → Rs	2 Pm Fm Rs M

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1878phae.proj.:877.

SATURDAY, JULY 20, 1878.

	8	2	8
Bar.	30.004	29.992	29.966
Att. therm.	77.0	81.0	79.2
Psychr., dry & wet	74.4 66.9	77.1 69.2	68.3 65.6
No. 4	74.8	78.1	68.6
C. 3235 (wet)	67.4	70.7	66.7
Max., mast & set	91.8 74.3		
Min., —"—	66.1 73.3		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	4 N	4 E	1 E
Clouds	6 Pi Rm Rs Fm R	5 Pm Rm Fm → M Rs	3 Rm Pm Mo Fm →

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1878phae.proj.377.

SUNDAY, JULY 21, 1878.

	8 10m	2	8
Bar.	29.784	29.620	29.560
Att. therm.	75.7	77.5 ~~82.9~~	77.3
Psychr, dry & wet	70.3 67.3	82.8 74.5	68.0 66.4
No. 4	71.2	82.9	68.5
G. 3235 (wet)	68.2	75.1	66.9
Max, unset & set	82.9 74.7		
Min. " "	67.1 70.5		
Gauge, 03. & inch.	0		
Aurora			
Zod. light			
Wind	3 S E clr & hzy 5 hzy	4 S	4 N 5 NW
Clouds	10 Pm Cum ~~1~~	5 M R Rs & P	3 Pm M Cum P ~~1~~

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1878phae.proj.0177.

MONDAY, JULY 22, 1878.

	8	2	8
Bar.	29.488	29.511	29.614
Att. therm.	72.5	75	74.3
Psychr., dry & wet	71.0 64.9	74.3 64.3	67.3 60.1
No. 4	71.5	75.0	67.7
C. 3235 (wet)	65.0	65.1	61.0
Max., mast & set	82.5 78.3		
Min., — & —	64.3 70.5		
Gauge, oz. & inch.	6 0.530		
Aurora			
Zod. light			
Wind	3 W S W	4 W N W	6 W N W
Clouds	1 Cu N	9 Cu N Cu —	3 N Cu →

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TUESDAY, JULY 23, 1878.

	8	2	8
Bar.	29.844	29.921	29.998
Att. therm.	66.8	71.0	74.9
Psychr., dry & wet	64.5 57.4	74.1 60.2	70.0 61.6
No. 4	65.0	74.7	70.7
C.B.235 (wet)	58.1	60.6	63.7
Max., dry & wet	71.1 68.4		
Min., — " —	58.6 64.1		
Gauge, oz. & inch.			
Aurora			
Zod. light			
Wind	12 NW	5 NW	0 NW
Clouds	8 Fim Mk V	4 Mk Fim P 1	1 PRs Fm

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1878phae.proj.1877.

WEDNESDAY, JULY 24, 1878.

	8	2	8
Bar.	30.080	30.029	30.014
Att. therm.	68.9	75.2	78.7
Ryder., dry & wet	69.4 62.7	83.5 66.1	72.7 63.8
No. 4	69.7	84.3	73.6
C. 3235 (wet)	63.6	66.9	65.4
Max., must & wet	77.0 69.0		
Min., — " —	58.7 68.2		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	0 W	6 WSW	0 WSW
Clouds	5 haze	5 haze ll 7m	1 P 7m

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THURSDAY, JULY 25, 1878.

	8		2		8	
Bar.	29.965		29.862		29.884	
Att. therm.	71.2		77.4		79.3	
Psychr., dry & wet	71.6	64.2	85.6	69.8	75.9	68.4
No. 4	71.9		86.2		76.7	
C. 3235 (wet)	64.8		70.6		69.6	
Max., unset & set	83.4	71.0				
Min., — " —	60.5	70.4				
Gauge, oz. & inch.	0					
Aurora						
Zod. light						
Wind	2 SW		7 SW		6 SW	
Clouds	5 P Rs Fm haze		4 M Fm haze		10 P Fm	

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FRIDAY, JULY 26, 1878.

	8	2	8
Bar.	29.882	29.820	29.773
Att. therm.	73.9	77.0	78.0
Psychr., dry Swct	71.6 68.1	83.4 72.8	73.5 68.1
No. 4	72.2	84.4	74.0
C. 3235 (wet)	68.8	73.5	69.0
Max., unset Swct	85.3 71.8		
Min., " "	67.8 71.0		
Gauge, 0.3 inch.	0		
Aurora			
Zod. light			
Wind	5 SW	12 SSW	9 SSW
Clouds	10 Cu Sc	9 Cu Sc Nf	10 P
		haze	

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SATURDAY, JULY 27, 1878.

	8	2	8
Bar.	29.650	29.732	29.838
Att. therm.	74.7	77.5	79.8
Psychr., dry & wet	72.0 70.6	82.1 73.7	75.5 69.5
No. 4	72.3	83.1	76.2
C.3235 (wet)	71.0	74.3	70.8
Max., unset & set	84.0 72.0		
Min., " "	69.1 71.2		
Gauge, 0.inch.	1 3/8 0.121		
Aurora			
Zod. light			
Wind	6 SW	3 W	1 WSW
Clouds	10 Pm 7m — a little rain	8 Pm N 7m — Rs	10 PM 7m Rs

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1878phae.proj...877...

SUNDAY, JULY 28, 1878.

	8	2	8
Bar.	30.044	30.088	30.123
Att. therm.	73.6	77.4	79.5
Psychr., dry & wet	71.7 64.4	79.4 66.1	74.0 61.0
No. 4	72.0	80.4	74.2
6.3235 (wet)	65.0	67.0	63.2
Max., wet & dry	84.0 71.7		
Min., " "	63.2 70.9		
Gauge, 3. Inch.	0 1/4 0.022		
Aurora			
Zod. light			
Wind	6 NW	2 NW	0 calm
Clouds	0	3 M Fm →	9 Pm M Fm /

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1878phae.proj.377.

MONDAY, JULY 29, 1878.

	8	2	8
Bar.	30.180	30.150	30.130
Att. therm.	71.8	77.0	78.6
Rychr., dry & wet	68.4 64.3	74.3 64.5	71.3 66.4
No. 4	68.7	74.7	72.2
L.3235 (wet)	64.8	65.5	68.6
Max., unset & wet	80.0 68.5		
Min., — " —	58.4 67.8		
Gauge, 03. & inch.	0		
Aurora			
Zod. light			
Wind	1 NNE	5 E	2 SE
Clouds	3 M 7m → Ro haze	5 P M haze 7m	10 P

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TUESDAY, JULY 30, 1878.

	8	2	8
Bar.	30.118	30.055	30.044
Att. therm.	73.6	72.0	70.0
Sychr., dry & wet	63.4 63.5	60.6 60.4	59.0 58.3
No. 4	64.4	61.1	59.5
C. 3235 (wet)	64.0	60.9	59.0
Max., since last set	77.2 64.0		
Min., " "	63.9 63.9		
Gauge, 07. & inch.	2/8 .0.232		
Aurora			
Zod. light			
Wind	4 E	7 SE	3 E
Clouds	10 Pm raining	10 Pm 7m raining	10 Pm

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1878phae.proj.0177.

WEDNESDAY, JULY 31, 1878.

	8	2	8
Bar.	30.021	30.025	30.026
Att. therm.	66.9	67.6	68.6
Psychr., dry & wet	58.8 57.8	63.5 59.4	59.4 57.5
No. 4	59.0	64.1	59.9
C. 3235 (wet)	58.2	60.0	58.3
Max., unset & set	64.0 59.0		
Min., — "	57.3 58.2		
Gauge oz. & inch.	11 3/8 1.004		
Aurora			
Zod. light			
Wind	5 NE	4 NE	0 calm
Clouds	10 Pm	10 Pm M Fm L	1 Pm Fm

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1878phae.proj...377...

THURSDAY, AUGUST 1, 1878.

	8	2	8
Bar.	30.010	29.963	29.901
Att. therm.	66.4	68.5	69.8
Psychr., dry bulb	63.5	68.0	67.0
	61.1	65.3	64.9
No. 4	63.8	69.2	67.6
(3235 bulb)	61.8	65.9	65.8
Max., wet bulb	65.2		
	63.6		
Min., "	58.2		
	63.1		
Gauge, 03. Inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	1 ESE	1 E	3 S
Clouds	10 Pm	10 Pm fog	10 Pm

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FRIDAY, AUGUST 2, 1878.

	8	2	8
Bar.	29.740	29.700	29.698
Att. Therm.	68.6	72.8	73.2
Psychr., dry / wet	67.5 66.5	69.7 66.7	65.4 64.9
No. 4	68.0	70.2	66.3
Lo. 3235 (wet)	67.0	67.2	66.0
Max., unset / set	71.0 67.7		
Min., — " —	63.0 67.2		
Gauge, oz. / inch.	0 / 0.011		
Aurora			
Zod. light			Cloudy Clouds & twilight
Wind	0 calm	3 E	3 SE
Clouds	10 Pm fog	8 Pn Pm M 7m — Rs; a little rain	6 Pm M 7m →

Showers in the afternoon with a little thunder

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SATURDAY, AUGUST 3, 1878.

	8	2	8
Bar.	29.750	29.738	29.798
Att. therm.	69.1	74.4	77.7
Psychr., dry & wet	64.5 63.9	83.2 74.3	70.0 67.7
No. 4	65.5	83.8	70.8
6.3235 (wet)	62.2	75.0	69.2
Max., must & set	77.3 64.4		
Min., — " —	61.5 64.4		
Gauge, 0. Inch.	3 3/8 0.298		
Auroza			Clouds & twilight
Zod. light			Clouds & twilight
Wind	0 calm	2 S	1 N
Clouds	10 P fog	7 M fair →	2 Pm M fair →

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1878phae.proj.377.

SUNDAY, AUGUST 4, 1878.

	8	2	8
Bar.	29.884	29.912	29.899
Att. therm.	72.0	76.3	74.4
Psychr., dry/wet	72.4 68.5	72.2 68.2	64.0 64.0
No. 4	72.5	73.1	65.2
C. 3235 (wet)	69.0	69.0	65.0
Max., must/wet	83.4 72.0		
Min., —"—	*66.2 71.8		
Gauge, 03. Inch.	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 W	1 S E	2 S W
Clouds	1 P Rs Large	10 Pm M 7m; a little rain	10 Pm 7m a little rain

* Doubtful.

Thunder-showers afternoon.

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1878phae.proj.0377

MONDAY, AUGUST 5, 1878.

	8	2	8
Bar.	29.992	29.949	29.970
Att. therm.	69.5	75.1	78.1
Psychr., dry & wet	69.3 66.8	83.1 73.7	72.3 70.1
No. 4	69.6	83.5	73.2
C. 3235 (wet)	64.1	74.7	71.0
Max., unset & set	82.2 68.0		
Min., — " —	59.7 68.9		
Gauge, sq. inch	5¼ 0.463		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 SW	4 SW	4 S
Clouds	2 haze 7m	1 Cu N Rs 7m	10 P Rs 7m

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1878phae.proj.377.

TUESDAY, AUGUST 6, 1878.

	8	2	8
Bar.,	29.896	29.790	29.751
Att. therm.	73.5	76.0	74.9
Psychr., dry & wet	66.3 60.1	70.5 68.2	65.5 65.2
No. 4	66.7	70.8	65.6
C. 3235 (wet)	65.7	68.5	65.5
Max., unset & set	83.6 67.5		
Min., — " —	65.5 66.5		
Gauge, oz., & inch.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	1 SE	5 E	0 calm
Clouds	10 Pm fog	10 Pm	10 Pm Fm —

Thunder showers afte noon

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1878phae.proj...377...

WEDNESDAY, AUGUST 7, 1878.

	8	2	8
Bar.	29.785	29.684	29.772
Att. therm.	71.7	76.2	76.5
Psychr., dry	69.3	80.6	65.9
Psychr., wet	67.0	70.6	63.0
No. 4	69.6	81.2	66.4
C. 3235 (wet)	67.4	71.6	64.8
Max., unset	72.5		
Max., set	68.0		
Min., unset	63.8		
Min., set	68.4		
Gauge, oz.	13 3/4		
Inch.	1.148		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	3 WNW	5 SW	2 SW
Clouds	1 Pm Fm	4 Pm N Fm	2 Pm Fm

Shower with a little thunder about 3 P.M.

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1878phae.proj.:377.

THURSDAY, AUGUST 8, 1878.

	8	2	8
Bar.	29.821	29.820	29.808
Att. therm.	70.0	74.5	77.3
Psychr., dry & wet	68.6 62.6	77.5 65.7	71.2 66.5
No. 4	68.6	78.7	72.2
C. 3235 (wet)	63.1	66.8	68.8
Max., unset & set	80.8 68.5		
Min., — " —	59.0 68.0		
Gauge, oz. & inch.	0 1/4 0.022		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	6 WNW	6 WNW	0 S
Clouds	0 Pm. 7m	5 M 7m →	10 Pm 7m raining

Rain beginning about 8 P.M.
~~Rain~~ Lightning without thunder.
Afterwards a heavy thunderstorm,
beginning about 10 P.M.

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1878phae.proj...377...

FRIDAY, AUGUST 9, 1878.

	8	2	8
Bar.	29.722	29.653	29.618
Att. therm.	72.2	75.2	74.4
Psychr., dry & wet	70.7 68.4	70.0 66.6	66.7 66.8
No. 4	71.8	70.7	67.1
6.3235 (wet)	68.7	67.2	67.2
Max., wet & dry	78.5 64.3		
Min., " "	61.9 70.5		
Gauge, oz. & inch.	15 3/4 1.390		
Aurora			
Zod. light			
Wind	5 SW	3 N-E	2 SW
Clouds	10 Pm	10 Pm M 7m/1	9 Pm M 7m

Much thunder all day. Shower for three minutes at 3 1/5 P.M. Large hailstones at 5 2/3 P.M. for about 10 minutes; then heavy showers.

Special record of hail made by Prof. Pickering.

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1878phae.proj.377.

SATURDAY, AUGUST 10, 1878.

	6	2	8
Bar.	29.730	29.758	29.774
Att. therm.	71.0	76.1	76.4
Psychr., dry & wet	70.8 65.4	78.2 68.5	71.3 66.2
No. 4	71.3	79.2	71.5
Co. 3235 (wet)	66.1	69.1	67.0
Max., must & set	83.6 69.5		
Min., — " —	64.6 70.2		
Gauge, oz. & inch.	*2 1/8 0.188		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 WSW	6 W	5 SW
Clouds	8 Pm PtR Rm tm	8 Pm M [illegible] 7m — R	10 Pm 7m

*At 7½ P.M. Aug. 9 1.900 inches
8 A.M. " 10 0.188 "
2.097 "

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1878phae.proj...377...

SUNDAY, AUGUST 11, 1878.

	8	2	8
Bar.	29.811	29.796	29.827
Att. therm.	72.2	76.0	77.1
Psychr., dry bulb	70.3	79.0	68.9
	65.7	68.5	65.6
No. 4	70.8	79.7	69.8
e. 3235 (wet)	66.2	69.2	66.4
Max., mast, dry bulb	79.0	70.0	
Min., — " —	65.0	69.4	
Gauge, 03 Inch.	0		
Aurora			Moonlight
Zod. light			Moonlight
Wind	1 W	5 SW	3 S W
Clouds	10 Pm Fm Rs	1 Pm M Fm	0 M Rs

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1878phae.proj.0377

MONDAY, AUGUST 12, 1878.

	8	2	8
Bar.	29.926	29.925	29.936
Att. therm.	70.8	75.5	77.6
Psychr., dry & wet	68.3 62.2	78.9 66.8	70.2 65.8
No. 4	68.2	79.5	71.2
9.3235 (wet)	62.7	67.8	67.2
Max., unset & wet	79.8 68.0		
Min., — " —	60.2 67.5		
Gauge, 03 Inch.	0		
Aurora			
Zod. light			Moonlight
			Moonlight and clouds
Wind	2 W	4 WNW	0 calm
Clouds	0	5 M 7m	0 Pm M 7m

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1878phae.proj...377...

TUESDAY, AUGUST 13, 1878.

7.30m

	8	2	8
Bars	29.978	× 29.559	29.982
Attr therms.	70.8	76.0	77.3
Psychr., dry & wet	69.5 64.6	82.4 70.3	71.8 66.9
			~~72.3~~
No. 4	69.6	83.2	72.3
C. 3235	65.2	71.3	67.8
Max., unset & set	79.0 69.1		
Min., —"—	60.6 68.8		
Gauge, oz. & inch.	0		
Aurora			
Zod. light			
Wind	1 SW	2 S W	4 S W
Clouds	3 haze	5 Mostly Fair	9 Fair Portions

× Supposed to be incorrectly read or recorded. The Signal Service observer in Boston, on inquiry by telephone Sept. 4, reported that his record showed no great fluctuation of the barometer Aug. 13.

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1878phae.proj.0377

WEDNESDAY, AUGUST 14, 1878.

	8	2	8
Bar.	30.030	30.048	30.063
Att. therm.	70.9	76.4	78.4
Psychr., dry & wet	69.7 65.5	79.7 68.2	70.6 63.6
No. 4	69.8	80.2	71.3
Le. 3230 (wet)	66.1	69.3	66.0
Max., mint & set	82.3 69.3		
Min., — " —	59.8 68.9		
Gauge, 09. & inch.	0 1/16 0.005		
Aurora			None
Zod. light			None; Milky Way invisible
Wind	0 WSW	4 E	1 SE
Clouds.	1 haze	1 haze	0 Pm

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1878phae.proj...177...

THURSDAY, AUGUST 15, 1878.

	8	2	8
Bar.	30.140	30.179	30.202
Att. Ther.	70.8	73.8	74.4
Psych, dry & wet	66.8 64.9	72.2 68.4	67.7 66.2
No 4.	67.6	73.1	68.4
C. 3235 (wet)	65.2	69.2	67.0
Max., wet & dry	80.8 67.0		
Min., — " —	59.0 66.4		
Gauge, dry & wet.	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	2 NNE	0 calm	0 calm
Clouds	10 Pm	10 Pm	10 Pm fog

A few drops of rain in the afternoon

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1878phae.proj.0377

FRIDAY, AUGUST 16, 1878.

	8	2	8
Bar.	30.264	30.236	30.205
Att. therm.	72.7	76.0	77.0
Psych., dry & wet	75.1 71.4	76.0 71.4	73.4 73.3
No 4	75.5	77.3	74.5
C. 3235 (wet)	71.8	72.0	74.0
Max., maxet & set.	74.3 74.2		
Min., " "	66.3 74.1		
Gauge, oz. & inches.	0		
Aurora			Cloudy
Zod. light			Cloudy
Mid	4 S	2 S E	0 S
Clouds	8 Pm Fm →	10 Pm	10 Pm raining

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1878phae.proj.1877.

SATURDAY, AUGUST 17, 1878.

	8	2	8
Bar.	30.114	30.080	30.086
Att. Therm.	74.4	76.2	77.6
Psych., Dry & Wet.	73.0 71.6	81.4 74.8	69.6 66.1
No. 4, C, 3235 (wet)	73.7 72.0	81.6 75.4	71.5 66.8
Max., wet & dry	79.3 72.8		
Min., — " —	70.1 72.3		
Gauge, oz. & inches	2½ 0.221		
Aurora			Cloudy
Zod. light			Cloudy
Wind	3 SW	4 SSW	4 SW
Clouds	10 Pm Fm →	10 Pm M Fm	10 Pm Fm raining

Some thunder & lightning at 8 P.M. with rain

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1878phae.proj.377.

SUNDAY, AUGUST 18, 1878.

	8	2	8
Bar.	29.914	29.854	29.837
Att. Therm.	73.8	78.0	77.0
Psych., dry & wet.	73.4 72.4	80.4 69.2	67.6 60.8
No. 4 C. 32 35 (wet)	73.7 72.6	80.9 69.9	68.3 61.4
Max., sunset & set	81.0 73.0		
Min., — " —	66.4 72.6		
Gauge, oz. & inches	0 5/8 0.055		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Mid Clouds	2 SW	6 WSW	3 NW
	10 Pm 7m ↗	6 Pm M 7m →	1 Pm 7m

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1878phae.proj...877...

MONDAY, AUGUST 19, 1878.

	8	2 1/4	8
Bar.	29.750	29.677	29.678
Att. Therm.	69.5	74.4	76.0
Psych., dry & wet.	66.8 60.9	77.4 66.2	74.4 64.2
No. 4.	66.8	77.8	71.0
C. 3235 (wet)	61.5	66.9	65.2
Max., insect & rel.	80.5 67.2		
Min., — " —	58.2 66.3		
Gauge, oz. & inches	0		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind	5 WNW	5 NW	5 WNW
Clouds	0 P 7m	6 P M 7m ↘ Rs	10 Rs 7m

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1878phae.proj.177.

TUESDAY, AUGUST 20, 1878.

	8	2	8
Bar.	29.619	29.598	29.643
Att. Therm.	69.7	75.4	74.4
Psycl., dry & wet	68.5 63.4	76.2 67.0	69.5 64.0
No. 4	68.5	77.1	70.0
C. 323 (wet)	63.9	67.6	64.7
Max., sunset & set.	77.2 68.6		
Min., — " —	62.0 67.8		
Gauge, oz. & inches	0		
Aurora.			None
Zod. light.			None; Milky Way barely visible.
Wind.	4 WNW	7 N	5 NW
Clouds.	2 Pr Rs R 7m →	6 Pm M 7m →	0 Pm 7m

Light shower about 4 P.M.

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1878phae.proj...177...

WEDNESDAY, AUGUST 21, 1878.

	8	2	8
Bar.	29.732	29.787	29.894
Att. Therm.	70.8	74.3	75.3
Psych., Dry & wet.	69.3 65.2	74.7 65.4	68.2 62.9
No. 4.	69.7	75.2	68.8
C. 3205 (wet)	65.6	66.1	64.0
Max., maset & set	78.2 69.2		
Min., — " —	63.1 68.5		
Gauge, oz. & inches	0 1/8 0.011		
Aurora.			Cloudy
Zod. light			Cloudy
Wind	5 N	2 W	1 N
Clouds	10 Cu Fra	10 Cu Fra	10 Cu

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1878phae.proj.377.

THURSDAY, AUGUST 22, 1878.

	8	2	8
Bar.	30.059	30.112	30.141
Att. therm	70.9	70.7	70.2
Psych, dry & wet.	62.6 61.9	63.8 57.3	59.1 55.6
No. 4	65.1	64.4	59.3
C. 32 35 (wet)	62.8	58.0	57.0
Max., maxt & pet.	75.6 64.6		
Min., — „ —.	61.6 64.4		
Gauge, oz & inches	0½ 0.044		
Aurora			None
Zod. light			suspected only
Wind	2 ENE	6 E	0 calm
Clouds	10 Cu M 7m	7 Cu M 7m	0 7m

Rain early

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1878phae.proj...377.

FRIDAY, AUGUST 23, 1878.

	8	2	8
Bar.	30.215	30.212	30.205
Att. Therm.	64.8	70.5	72.6
Psych, dry & wet.	58.6 57.2	70.1 59.5	60.3 *55.1
No. 4	58.5	70.3	61.1
C. 3235 (wet)	57.8	61.5	*58.0
Max, maset & set	65.8 59.0		
Min, —— " ——	49.2 58.1		
Gauge, oz. & inches	0 1/4 0.022		
Aurora			None, some clouds
Zod. light			None; Milky Way invisible
Wind	2 ENE	2 SE	3 SE
Clouds	0 haze	0 Fm	0 Fm Rs

*Carefully read; wetted 20 minutes before observation and evidently wet when observed.

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1878phae.proj.177.

SATURDAY, AUGUST 24, 1878.

	8	~~2~~ 3¼	8
Bar.	30.153	30.038	29.974
Att. Therm.	65.2	71.7	72.0
Psych, dry & wet	61.1 57.6	73.4 64.5	61.5 57.8
No. 4	60.8	75.2	62.4
C. 3235 (wet)	56.2	65.2	59.3
Max., maset & set.	70.2 61.2		
Min., — " —	50.9 60.5		
Gauge, oz & inches	0		
Aurora.			
Zod. light			
			Cloudy Cloudy
Wind	4 SW	4 SSW	5 SSE
Clouds	0	9 P. Fm	9 P. Fm

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1878phae.proj...377.

SUNDAY, AUGUST 25, 1878.

	8	2	8
Bar.	29.668	29.622	29.773
Att. Therm.	67.8	69.5	69.0
Psych., Dry & Wet	64.8 64.5	65.7 64.9	62.7 55.3
No. 4.	65.2	66.7	62.9
C. 3235 (wet)	64.8	65.2	56.2
Max., unset & set	74.5 64.4		
Min., — " —	59.9 64.3		
Gauge, oz & inches	1½ 0.132		
Aurora.			None
Zod. light.			None
Wind.	6 SSW	3 NW	5 NW
Clouds.	10 Pm / Fm 11	10 Pm / Fm → raining	0

Showers till about 3 P.M.

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1878phae.proj.0377

MONDAY, AUGUST 26, 1878.

	8	2 1/4	8
Bar.	29.958	29.914	29.949
Att. Therm.	63.3	69.5	72.0
Psych, dry & wet.	60.0 55.4	70.9 60.1	61.2 57.6
No. 4	59.7	71.2	62.2
C. 3235 (wet)	56.0	61.1	60.2
Max., wet & set	71.2 60.4		
Min., —— ,, —.	51.2 59.6		
Gauge, oz + inches	3 1/4 0.287		
Aurora			None
Zod. light			None
Wind	1 NW	2 W	1 SE
Clouds	0	0 Rs Fm	0 P Rs Fm

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1878phae.proj...877...

TUESDAY, AUGUST 27, 1878.

	8	2	8
Bar.	29.965	29.941	29.958
Att. Therm.	65.2	71.4	72.2
Psych, dry & wet	63.3 60.3	76.2 65.8	64.4 60.9
No. 4	63.2	76.9	65.2
C. 3235 (wet)	60.8	67.0	62.4
Max., sunset & sch	71.2 63.3		
Min., —— " —	53.7 62.8		
Gauge, 07 & inches	0		
Aurora			
Zod. light			
			Cloudy
			Cloudy
Wind	2 SW	4 SW	2 SSW
Clouds	3 P Rs Fm	7 P M Fm	1 Pm Fm

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1878phae.proj.0377.

WEDNESDAY, AUGUST 28, 1878.

	8		2		8	
Bar.	29.999		30.019		30.048	
Att. Therm.	67.1		73.0		74.0	
Psych, dry & wet	64.5	61.8	71.5	64.8	62.0	60.0
No. 4	64.5		72.0		62.8	
C. 3205 (wet)	62.4		66.7		61.3	
Max., wet & dry	76.8	69.5 (4)				
Min., — " —	56.9	64.3				
Gauge, oz & inches	0					
Aurora.						
Zod. light					Clouds	
					Clouds	
Wind	1 S W		3 E		0	
Clouds	0 Cum		1 Cum M haze		8 Pm	

W.H.ob.

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1878phae.proj...377.

THURSDAY, AUGUST 29, 1878.

	8	2 1/4	8 10h
Bar.	30.096	30.070	30 07 0
Att. Therm	68.0	74.0	69.0
Psych, Dry & Wet	64.0 61.4	71.2 59.6	62.0 59.3
No. 4	64.3	71.6	62.9
C. 3235 (wet)	61.9	61.9	60.8
Max., unset & set	73.7 64.1		
Min., — " —	59.1 63.7		
Gauge, 0. & inches	0		
Aurora			
Zod. light			
Wind	0 1 N	2 E	
Clouds	9 M Pm Cum	1 M Cum haze	0

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1878phae.proj.0177.

FRIDAY, AUGUST 30, 1878.

*	8	2	8
Bar	30.091	30.121	30.180
Att. therm	66.4	76.2	76
Psych, dry & wet.	68.3 64.0	79.4 70.9	68.8 64.8
No. 4	68.1	80.0	69.
C. 3235 (wet)	64.6	72.2	66.2
Max., moist & rel	71.7 68.2		
Min., — „ —	57.8 62.7		
Gauge, oz. & inches	0		
Aurora.			
Zod. light			
Wind	1 W 5 W	2 SE	
Clouds	0 haze	1 Mthin slight haze	0 ~~haze~~

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1878phae.proj...377...

SATURDAY, AUGUST 31, 1878.

	8	2	~~9~~ ~~7~~ ~~h~~ ~~10~~ h
Bar.	30.239	30.229	30.208 ~~30.212~~
Att. Therm.	70.0	76.0	74.5
Psych, dry & wet.	69.1 66.5	82.9 70.9	67.2 65.2
No. 4.	69.0	83.5	68.0
C. 3235 (wet)	67.0	72.0	66.1
Max., sunset & set.	79.4 68.8		
Min., —— " —.	61.4 68.5		
Gauge, oz. & inches	0		
Aurora			Clouds
Zod. light			Clouds
Wind.	1 SE	3 S	4 SW S.
Clouds.	0 haze	5 M Pm Fm haze	10 P M Fm

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1878phae.proj.0377

SUNDAY, SEPTEMBER 1, 1878.

	8	2 11/4	8
Bar.	30.096	30.009	30.002
Att. Therm.	72.7	77.0	79.0
Psych, dry & wet	73.3 70.8	84.3 77.3	75.0 73.4
No. 4	73.8	84.9	75.8
C. 32 35 (wet)	71.4	78.0	74.0
Max, sunset & set	83.0 73.1		
Min, — " —	66.8 73.0		
Gauge, oz, & inches			
Aurora			
Ind. light			
Wind	3 S S W	6 S W	2 S E
Clouds.	10 Pm M	6 Pm M Fine — R a	0 Pm

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1878phae.proj...377.

MONDAY, SEPTEMBER 2, 1878.

	8	2	8
Bar.	30.002	29.955	29.964
Att. Therm.	75.4	80.0	78.4
Psych, dry & wet.	76.7 73.5	80.9 73.9	72.8 71.8
No. 4	77.0	82.2	73.4
C. 3235 (wet).	74.0	74.5	72.8
Max., maxset & set.	84.3 76.6		
Min., — " — .	71.2 76.2		
Gauge, oz, & inches	0 1/2 0.0414		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	2 S W	0 S W	2 S E
Clouds.	2 Pcu fm Rs	10 Pm M fm a little rain	5 Pcu fm —

Thundershower after 2 P.M.

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1878phae.proj.0377

TUESDAY, SEPTEMBER 3, 1878.

	8	2	8
Bar.	30.042	30.052	30.113
Att. Therm.	74.2	78.0	77.0
Psych., dry & wet.	71.5 69.5	74.5 70.6	63.7 63.3
No. 4	72.3	74.7	64.3
C. 3235 (wet)	70.0	71.0	64.0
Max., maset & set	87.5 71.1		
Min., — " —	67.5 71.3		
gauge, oz. & inches.	3 1/8 0.276		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	0 S	4 E	3 NE
Clouds.	4 Pm 7m Rs haze	8 Pm 7m ∠	10 Pm fog

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1878phae.proj...877...

WEDNESDAY, SEPTEMBER 4, 1878.

	8	2	8
Bar.	30.127	30.117	30.116
Att. Therm.	70.9	70.3	69.8
Psych. Dry & wet.	62.7 62.4	63.3 63.0	61.1 60.9
No. 4.	63.3	63.7	61.6
C. 3235 (wet)	62.9	63.5	61.5
Max., wet & set	75.3 63.1		
Min., — " —	60.4 62.5		
Gauge, oz. & inches.	0 1/8 0.011		
Aurora.			Cloudy
Zod. light.			Cloudy
Wind.	4 NE	5 ENE	5 NE
Clouds.	10 Pm fog	10 Pm fog fine rain	10 Pm fog fine rain

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1878phae.proj.0377

THURSDAY, SEPTEMBER 5, 1878.

~~8~~	8	2	8
Bar.	30.039	30.010	30.028
Att. Therm.	68.4	69.5	69.0
Psych., dry & wet	62.9 62.9	65.2 64.2	62.0 61.9
No. 4	63.2	65.5	62.6
C. 3235 (wet)	63.4	64.7	62.2
Max., wet & wet	63.8 63.0		
Min., — " —	60.7 62.7		
Gauge, q. & inches.	4¼ 0.375		
Aurora.			Cloudy
Zod. light.			Cloudy
~~Clo~~ Mid. Clouds.	4 NE 10 Pm fog	6 ENE 10 Pm a little rain	4 NE 10 Pm fog

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1878phae.proj...877.

FRIDAY, SEPTEMBER 6, 1878.

	8	2	8
Bar.	30.096	30.103	30.158
Att. Therm.	67.4	72.1	71.0
Psych., dry & wet.	63.2 61.7	71.0 65.5	63.7 62.5
No. 4.	63.6	71.4	64.5
C. 3235 (wet).	62.3	66.2	63.6
Max., wet & dry.	66.2 63.4		
Min., —— " ——.	60.9 63.0		
Gauge, 0.7 inches	0		
Aurora.			Moonlight Intervals
Zod. light.			Moonlight
Mid.	1 N	3 ESE	0 calm
Clouds.	10 Pm Fm	1 M Fm haze	2 Pm Fm haze

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1878phae.proj.0377

SATURDAY, SEPTEMBER 7, 1878.

	8	2	8
Bar.	30.386	30.446	30.472
Att. Therm.	67.3	66.6	61.7
Psych, dry + wet.	58.0 57.1	61.9 56.8	55.4 53.5
No. 4	58.6	62.1	56.0
C.3235 (wet)	57.8	57.6	54.4
Max, maxt + set	72.8 59.0		
Min., — " —	57.8 57.8		
Gauge, 0.7 inches	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	6 NE	7 E	6 NE
Clouds	10 Pm 7m L a little rain	10 Pm M 7m	4 Pm 7m —

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1878phae.proj_0377.

SUNDAY, SEPTEMBER 8, 1878.

	8	2	8
Bar.	30.450	30.405	30.387
Att. Therm.	61.5	66.8	65.6
Psych. dry & wet.	58.0 55.4	63.4 56.0	57.3 54.7
No. 4	57.7	63.7	57.4
C 3235 (wet)	56.0	57.2	56.0
Max., musett oct.	62.0 58.0		
Min., — " —.	49.3 57.2		
Gauge, oz. & inches	0 3/4 0.066		
Aurora.			Moonlight
Zod. light.			Moonlight
Wind	5 NE	5 SE	1 SE
Clouds	0 Pm Fm	0 Pm Fm	0

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1878phae.proj.0177.

MONDAY, SEPTEMBER 9, 1878.

	8	2	8
Bar.	30.333	30.298	30.276
Att. therm.	61.8	67.0	67.8
Psych, dry & wet.	54.4 54.0	66.9 62.7	61.3 59.9
No. 4	55.0	67.6	61.8
C.3235 (wet)	54.5	63.6	60.4
Max., wet + set	64.3 55.2		
Min., —"—	47.9 53.8		
Gauge, q.r. inches	0		
Aurora			
Zod. light.			Moonlight and clouds
			Moonlight and clouds
Mid Clouds.	1 NE 10 Pm fog	4 ENE 5 Pi Rs M Fm — Fm	0 E 4 P Fm —

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1878phae.proj...377.

TUESDAY, SEPTEMBER 10, 1878.

	8	2	8
Bar.	30.245	30.197	30.172
Att. Therm.	65.0	71.1	70.3
Psych, dry & wet.	63.7 62.3	70.3 66.2	64.7 63.8
No. 4	64.2	70.8	65.2
C.3235 (wet).	63.0	67.0	64.5
Max, sunset & set.	69.3 63.9		
Min., — " —.	53.8 63.3		
Gauge, oz. & inches	0		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	1 NNE	4 E	0 E
Clouds.	10 Pm	6 Pm Fm	10 Pm Fm

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1878phae.proj.0177.

WEDNESDAY, SEPTEMBER 11, 1878.

	8	2	8
Bar.	30.083	30.190	30.182
Att. Therm.	67.8	71.9	70.8
Psych. dry & wet.	65.6 64.8	69.8 67.0	64.4 64.6
No 4	65.8	70.3	65.8
C, 3235 (wet).	65.1	67.7	65.0
Max., maxet & set.	71.4 65.6		
Min., " — "	60.8 65.0		
Gauge, q. & miles	0		
Aurora			
Zod. light			
Mid	0 NNE	6 ENE	6 NE
Clouds	10 Pm fm	10 Pm fine rain	10 Pm raining

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1878phae.proj...177...

THURSDAY, SEPTEMBER 12, 1878.

	8	2	8
Bar.	30.122	30.061	30.119
Att. Therm.	68.8	70.4	72.1
Psych, dry & wet.	65.2 65.2	69.8 69.5	69.8 69.4
No. 4	65.6	70.3	70.2
C. 3235 (wet)	65.5	69.8	70.0
Max, unset & set	74.2 65.0		
Min., — " —	63.7 64.8		
Gauge, oz. & inches	2 3/4 0.243		
Aurora.			
Zod. light.			Moonlight and clouds / Moonlight and clouds
Wind.	4 N.E.	2 E.	2 S S E
Clouds.	10 Cu Sc a little rain	10 Rain raining	1 Cu Strat

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1878phae.proj.1877.

FRIDAY, SEPTEMBER 13, 1878.

	8	2	8
Bar.	30.016	29.893	29.836
Att therm	70.2	74.8	75.6
Psych, dry + wet	69.3 69.5	82.9 76.6	73.3 71.6
No. 4	69.7	83.5	74.2
C. 3235 (wet)	69.8	77.3	72.1
Max., wet & set	74.2 69.0		
Min., " "	64.5 68.9		
Gauge, oz. & inches	8 5/4 0.761		
Aurora.			
Zod. light.			Cloudy Cloudy
Mid Clouds	0 cu strm 10 Rn Fog	12 S 8 Rn N 7 Rn N	6 S. 10 Rn, a little rain

Occasional showers

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1878phae.proj..377.

SATURDAY, SEPTEMBER 14, 1878.

	8	2	8
Bar	29.952	29.938	29.965
Att. Therm.	71.2	73.4	70.3
Psych, dry & wet	63.9 57.8	70.0 57.9	61.2 55.2
No 4	64.1	70.1	61.4
C. 3235 (wet)	58.6	58.9	56.8
Max., max. & act	82.7 64.5		
Min., — " —	60.5 63.5		
gauge, of inches	0 3/8 0.033		
Aurora			Moonlight
Zod. light			Moonlight
Wind	5 W	6 SW	3 S
Clouds	1 Pm Fm	0 Pm Rs	0 Fm

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1878phae.proj.0377.

SUNDAY, SEPTEMBER 15, 1878.

	8	2	8
Bar.	30.046	30.097	30.164
Att. Therm.	65.2	67.7	63.0
Psych, dry & wet	57.5 51.3	63.9 55.1	55.1 51.2
No 4	57.6	64.3	55.5
C. 3235 (wet)	52.0	55.9	52.1
Max., wet & dry	70.2 58.3		
Min., — " —	53.3 57.1		
Gauge, oz, & rain	0		
Aurora			None
Zod. light			None
Wind	6 NW	11 NNW	3 NNW
Clouds	1 Pm 7m	6 M 7m	0

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1878phae.proj...377.

MONDAY, SEPTEMBER 16, 1878.

	8	2	8
Bar.	30.322	30.326	30.309
Att. therm.	60.8	66.6	64.5
Psych, dry & wet.	52.8 49.7	64.4 57.0	54.2 52.4
No. 4	52,8	64.7	54.9
C. 3235 (wet).	50.7	58.6	53.9
Max., min & set	64.3 53.7		
Min, — " —	44.8 52,2		
Gauge, oz, & inches	0		
Aurora			None
Zod. light			None
Wind	3 N	4 SE	0 calm
Clouds	0 haze	0 fair haze	0 haze

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1878phae.proj - 177 .

TUESDAY, SEPTEMBER 17, 1878.

	8	2	8
Bar.	30.266	30.190	30.148
Att Thermo.	60.7	66.6	66.8
Psych dry & wet	54.8 53.7	71.8 63.5	60.3 58.5
No. 4	54.5	71.9	61.1
C 3235 (wet)	54.1	64.2	60.0
Max, wet & set	64.1 55.2		
Min, —"—	46.1 54.1		
Gauge, oz. & inches	0		
Aurora			None
Zod. light			None
Wind	1 SW	3 SW	3 SSE
Clouds	0 haze 7m	6 P 7m — Rs	1 haze

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WEDNESDAY, SEPTEMBER 18, 1878.

	8	2	8
Bar.	30.087	30.029	30.063
Att. therm.	64.0	71.1	73.8
Psych, dry & wet	63.0 61.6	78.3 68.9	70.5 66.0
No. 4	63.0	78.6	70.9
C. 3235 (wet	62.0	69.7	67.2
Max, maset & set	71.4 63.0		
Min, — " —	54.0 62.4		
Gauge, oz. & inches	0		
Aurora			None
Zod. light			None
Wind	3 W	4 SW	0 calm
Clouds	2 haze	0 haze	0 haze

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THURSDAY, SEPTEMBER 19, 1878.

	8	2	8
Bar	30.200	30.163	30.138
Att. Therm	67.2	72.1	69.1
Psych, dry & wet.	61.5 58.0	69.6 59.2	62.2 59.6
No. 4	61.5	70.1	62.8
C. 3235 (wet)	58.8	60.7	61.0
Max, minset & set	78.2 61.7		
Min, —— " ——	57.3 61.0		
Gauge, oz. & inches	0		
Aurora			None
Zod. light			None
Wind	3 N	3 SE	1 SE
Clouds	1 7m haze	1 7m haze	0 haze

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1878phae.proj...377.

FRIDAY, SEPTEMBER 20, 1878.

	8	2	8
Bar.	30.102	30.012	29.999
Att. Therm.	66.8	73.3	75.0
Psych, dry & wet	67.5 65.9	81.1 70.4	69.5 66.9
No. 4	67.6	81.5	70.3
C. 3235 (wet)	66.1	71.2	68.0
Max., unset & set	70.0 67.2		
Min., — " —	57.9 66.5		
Gauge, oz. & inches	0		
Aurora			None
Zod. light.			Slightly suspected
Wind	3 SW	3 SW	3 SW
Clouds	10 Pm Fm Fm	0 P Fm	0 Fm

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1878phae.proj.377.

SATURDAY, SEPTEMBER 21, 1878.

	8	2	8
Bar.	29.924	29.890	29.950
Att. Therm.	70.0	75.7	76.1
Psych, dry & wet.	70.7 68.5	82.0 71.6	71.1 65.7
No. 4	70.8	82.6	71.6
C. 3235 (wet)	68.9	72.0	66.5
Max., max't & set	81.0 70.4		
Min., — " —	63.7 70.1		
Gauge, 0.7 inches	0		
Aurora			
Zod. light.			Cloudy Cloudy
Wind	4 SW	2 WSW	2 SW
Clouds	1 PRs 7m haze	6 PRs M fm	10 Fm

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1878phae.proj...377...

SUNDAY, SEPTEMBER 22, 1878.

	8	2	8
Bar.	30.158	30.181	30.292
Att. Therm.	68.0	68.9	61.3
Psych, dry & wet.	57.7 50.9	64.1 51.3	52.7 45.2
No. 4	57.7	64.5	53.1
C. 3235 (wet)	51.8	52.1	46.1
Max., wet & set	52.2 58.8		
Min., — " —	53.8 57.0		
Gauge, 0.8 inches	0		
Aurora			None
Zod. light.			None
Wind	9 NW	9 NNW	2 N
Clouds	0 P Rs Fm	0 P Fm	0

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MONDAY, SEPTEMBER 23, 1878.

	8	2	8
Bar.	30.522	30.496	30.477
Att. Therm.	58.1	63.9	60.1
Psych., dry & wet.	47.3 43.5	58.4 50.4	47.7 †45.7
No. 4. C. 3235 (Wet)	47.3 44.4	58.7 51.9	48.8 †48.0
Max., unset & set	65.2 48.3		
Min., — ·· —.	40.1 46.8		
Gauge, oz. & inches	0		
Aurora			None
Zod. light.			None
Wind	4 N	3 E	2 E
Clouds	0	0 7m	0

Read carefully; both wetted 45 minutes before, and both evidently wet when observed.

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1878phae.proj...377...

TUESDAY, SEPTEMBER 24, 1878.

	8	2	8
Bar.	30.405	30.293	30.246
Att. therm.	57.1	65.0	66.3
Psych., dry & wet	49.8 48.2	68.5 59.9	61.7 58.9
No. 4	49.5	69.5	62.4
C. 3235 (wet)	49.0	61.5	60.2
Max., wet & dry	59.2 50.6		
Min., —"—	43.9 49.0		
Gauge, oz. & inches	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	0 SW	4 S	4 S
Clouds	0 Fm haze	9 Pm M Fm →	10 Pm

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1878phae.proj.377.

WEDNESDAY, SEPTEMBER 25, 1878.

	8	2	8
Bar.	30.207	30.200	30.180
Att. Therm	64.1	69.8	69.4
Psych, dry & wet	64.8 62.3	72.7 60.8	60.0 57.3
No. 4	64.5	72.8	61.0
C. 3235 (wet)	62.8	62.0	59.0
Max, wet & set	68.8 64.3		
Min., — " —	49.1 64.0		
Gauge, oz. & inches	0		
Aurora.			None
Zod. light.			None
Wind	1 W	2 WNW	0 calm
Clouds	0 Rs Fm	0 Rs M Fm	0 Haze

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1878phae.proj...377...

THURSDAY, SEPTEMBER 26, 1878.

	8	2	8
Bar.	30.101	30.002	30.104
Att. therm.	64.7	69.8	70.4
Psych., dry & wet	63.9 62.9	76.8 69.0	57.3 56.0
No. 4	64.0	77.6	58.1
C. 3235 (wet)	63.2	69.8	57.0
Max., wet & set	72.8 64.0		
Min., — " —	53.9 63.2		
Gauge, oz & inches	0		
Aurora			
Zod. light.			
			Cloudy Cloudy
Wind.	0 S.	10 S S W	2 NW
Clouds.	10 Pm Fm Lage	6 Pm M Fm	10 Pm

Heavy shower for a few minutes about 5 P. M.; some rain later

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FRIDAY, SEPTEMBER 27, 1878.

	8		2		8	
Bar.	30.300		30.281		30.354	
Att. Therm.	61.0		63.0		63.4	
Psych, dry & wet.	49.9	44.7	59.6	48.9	49.0	43.7
No. 4	50.1		59.6		49.8	
C. 3235 (wet)	45.7		49.8		45.0	
Max., max et set	77.5	51.0				
Min., — " —	45.8	49.5				
Gauge, oz & inches	4 7/8	0.430				
Aurora					None	
Zod. light.					None	
mid	9 N		10 NNW		6 N	
Clouds	0		0 Fm		0	

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1878phae.proj..377.

SATURDAY, SEPTEMBER 28, 1878.

	8	2	8
Bar.	30.467	30.408	30.356
Att. Therm.	55.7	61.2	57.9
Psych, dry & wet.	43.9 40.0	56.5 47.0	46.4 42.7
Hoh	44.2	56.6	47.1
C. 3235 (wet)	40.9	48.9	45.0
Max, wet & set	59.7 45.0		
Min, —"—	38.0 43.5		
gauge, qty inches	0		
Aurora			None
Zod. light			Cloudy
Wind	6 N	1 N	0 N
Clouds	0	0	0 P Nay

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1878phae.proj.377.

SUNDAY, SEPTEMBER 29, 1878.

	8	2	8
Bar.	30.348	30.296	30.256
Att. Therm.	56.3	60.4	61.9
Psych., dry & wet.	46.6 44.6	63.6 53.2	52.7 †48.6
No. H.	47.0	64.1	52.7
C. 3235 (wet).	45.2	54.7	†50.9
Max., wet & set.	57.0 47.4		
Min., — " —	38.8 46.0		
Gauge, oz. & inches	0		
Aurora.			
Zod. light			cloudy cloudy
Wind	0 SW	2 S	2 SE
Clouds	9 Pm Fm →	7 Pm Fm →	3 Pm Fm Haze

† Same remark as Sept. 23.

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1878phae.proj..177.

MONDAY, SEPTEMBER 30, 1878.

	8	2	8
Bar.	30.256	30.206	30.212
Att. Therm.	59.1	65.0	63.7
Psych, dry & wet.	52.3 50.4	67.3 60.7	53.6 52.3
No. 4	52.0	68.8	54.8
C. 3235 (wet)	51.1	61.5	54.0
Max, maxet & set.	63.2 53.0		
Min, " — " —	45.9 51.4		
Gauge, oz & inches	0		
Aurora			None
Zod. light.			None
Wind.	0 SW	2 SSW	1 S
Clouds.	0 haze	6 Pm M Fm	0

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1878phae.proj.0377

TUESDAY, OCTOBER 1, 1878.

	8	2	8
Bar.	30.192	30.118	30.066
Att. Therm.	59.4	65.2	67.0
Psych. dry & wet.	53.9 52.6	70.4 62.0	60.0 57.8
No. 4	53.7	71.0	60.5
C. 3235 (Wet).	53.4	63.0	58.8
Max. sunset & set.	68.2 54.2		
Min. " — " — .	47.4 53.2		
Gauge & remarks	0		
Aurora			Moonlight
Zod. light			Moonlight
Wind	2 SW	1 SW	2 S
Clouds.	0 Ro Fm	6 Pm Fm	0

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1878phae.proj.377

WEDNESDAY, OCTOBER 2, 1878.

	8	2	8
Bar.	29.975	29.896	29.896
Att. Therm.	62.4	69.2	70.5
Psych, dry & wet.	61.9 59.8	74.3 64.2	64.5 62.2
No. 4	61.8	74.3	65.3
C. 3235 (wet)	60.2	65.0	63.3
Max, maxet & set.	70.7 62.0		
Min, —— " ——	53.2 61.3		
Gauge, oz. & inches	0		
Aurora.			
Zod. light.			Moonlight Moonlight
Wind.	3 SW	6 SW	3 S
Clouds.	0 haze 7m	1 PRs 7m	1 P 7m

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1878phae.proj.0377.

THURSDAY, OCTOBER 3, 1878.

	8	2	8
Bar.	29.993	29.969	29.966
Att. therm	66.3	70.0	70.6
Psych, dry + wet	62.2 56.5	73.4 59.0	61.3 †54.6
No. 4	62.3	73.3	62.0
C. 3235 (wet)	57.2	60.8	†57.0
Max, since last set.	73.8 62.2		
Min, " "	58.8 61.8		
Gauge; ez + niches	0		
Aurora			Moonlight
Zod. light.			Moonlight
Mid Clouds.	4 NW 0 Pm	0 W 0 Rs 7m	2 S 0

†Same remark as Sept. 23.

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1878phae.proj.:377.

FRIDAY, OCTOBER 4, 1878.

	8	2 1/4	8
Bar.	30.013	29.948	29.970
Att. Therm.	63.0	69.3	69.5
Psych, dry thrm.	57.1 52.7	71.2 56.2	59.7 53.1
No. 4.	57.0	71.5	59.9
C. 32 35 (wet)	53.8	57.0	54.8
Max., musselthrm.	73.2 57.7		
Min., —..—	53.8 56.4		
Gauge, dg + inches	0		
Aurora.			Moonlight
Zod. light			Moonlight
Wind.	1 NW	2 NW	0 S
Clouds	0 haze Rs	0 1 Rs Fm	1 P

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1878phae.proj.177.

SATURDAY, OCTOBER 5, 1878.

	8	2	8
Bar.	30.033	30.017	30.040
Att. Therm.	61.5	65.8	66.3
Psych, dry & wet	52.7 48.0	63.6 51.9	53.0 49.0
No. 4	52.6	63.8	54.0
C. 3235 (wet)	48.9	53.4	51.5
Max; sunset & set	71.0 53.3		
Min — " —	45.9 52.2		
Gauge, ozs. & inches	0		
Aurora			
Zod. Light			
			Cloudy
			Cloudy
Wind	6 NNW	6 ENE	0 calm
Clouds.	0 Rs 7m	1 Pc M 7m	9 Pm 7m —

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1878phae.proj..377..

SUNDAY, OCTOBER 6, 1878.

	8 ½	2	8
Bar.	30.030	30.011	30.115
Att. Therm	60.0	60.1	61.2
Psych. dry & wet.	50.3 47.0	57.5 51.9	51.2 49.6
No. 4.	50.6	57.9	51.7
C. 3235 (wet).	48.0	52.6	50.8
Max; wet & dry	64.2 51.2		
Min; — " —	47.0 49.8		
Gauge, oz. & inches	0		
Aurora.			Moonlight
Zod. light.			Moonlight
Wind.	0 calm	3 NW	0 NW
Clouds.	10 Pm 7m a few drops of rain	10 Pm 7m →	0 7m

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1878phae.proj . 877 .

MONDAY, OCTOBER 7, 1878.

	8	2	8
Bar.	30.286	30.248	30.237
Att. Therm.	56.0	61.7	61.0
Psych, dry & wet	45.8 44.4	58.8 51.5	53.2 49.4
No. 4	45.8	58.9	52.8
C. 3235 (Neb).	45.3	53.0	51.2
Max; unset & set	57.8 46.7		
Min; — " —	40.2 45.2		
gauge, & inches	0		
Aurora			
Zod. light			Cloudy Cloudy
Mid Clouds.	0 NW 0	5 E 5 Pm Mfm Rs	3 S 10 Pm Fm

6 3/4 P.M. Lunar halo; measured with diopter as follows: inside diameter 23 1/4 inches; outside 24 1/4; inside again 23 3/8.

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1878phae.proj_377 .

TUESDAY, OCTOBER 8, 1878.

	8	2	8
Bar.	30.160	30.109	30.150
Att. Therm.	58.7	63.6	64.1
Psych, dry & wet	53.4 53.9	65.7 57.0	54.9 52.5
No. 4	55.6	65,8	56.1
C. 3235 (wet)	54.7	58.1	54.2
Max; max't & set.	59.6 55.7		
Min; — " —	45.3 54.9		
Gauge, oz & inches	0¼ 0.022		
Aurora			Cloudy
Zod. light.			Cloudy
Wind	2 S	1 SW	1 S
Clouds	10 Rm Fm	5 R Rs M Fm	9 P Rs

Lunar halo measured with dividers at 7¼ P.M.; inside diameter 21 1/16 inches; outside 25⅛; halo indefinite.

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WEDNESDAY, OCTOBER 9, 1878.

	8	2	8
Bar.	30.031	29.799	29.748
Att. Therm.	60.4	63.8	66.3
Psych, dry & wet.	59.7 58.3	69.8 65.5	56.8 56.1
Ht. H	59.7	70.3	57.8
C.3235 (Mst),	58.6	65.9	56.8
Max. set & set	65.6 59.5		
Min; —— " —	47.0 59.1		
Gauge, & & nickes	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	6 SSW	8 SW	6 W
Clouds	8 Pm 7m 11	10 Pm 7m 11	10 Pm raining

Much lightning after 5½ P.M. No thunder. Rain beginning about 7 P.M.

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THURSDAY, OCTOBER 10, 1878.

	8	2	8 1/2
Bar.	29.822	29.851	30.002
Att. Therm.	60.4	61.3	57.0
Psych, dry & wet.	51.4 45.6	59.5 49.2	50.0 45.1
No. 4	51,5	59.7	50,2
C. 3235 (wet).	46.6	49.9	46.5
Max; musch sch.	70.4 52.4		
Min; —"—	48.2 50.8		
Gauge, oz + inches	3 1/4 0.287		
Aurora			Moonlight
Zod. light			Moonlight
Wind	8 W	8 NW	4 W
Clouds	0 Pm Rs Fm	0 M Fm Rs	0

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1878phae.proj.:877.

FRIDAY, OCTOBER 11, 1878.

	8	2	8
Bar.	30.130	30.105	30.111
Att. therm.	56.4	59.0	59.0
Psych, dry & wet	45.7 43.9	53.3 47.5	51.0 46.3
No. 4	46.1	53.6	51.6
C. 3235 (wet)	44.8	48.6	47.4
Max; max & set.	59.4 46.5		
Min; — " — .	39.8 45.2		
Gauge, 0, & inches	0		
Aurora			
Zod. light.			Cloudy Cloudy
Mid Clouds.	4 N 9 Pc Rs Pm Fm	7 E 10 Pm M Fm	5 E 10 Pm Fm —

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1878phae.proj...877...

SATURDAY, OCTOBER 12, 1878.

	8	2	8
Bar.	30.000	29.846	29.741
Att. therm.	57.7	56.0	54.2
Psych, dry + wet.	45.8 45.9	47.6 47.9	41.2 41.4
No. 4	46.6	48.2	41.7
C 3235 (wet).	46.8	48.5	42.2
Max, wet + set	54.7 47.0		
Min, — " —	45.1 45.8		
Gauge oz, + inches	0		
Aurora			Cloudy
Zod. light.			Cloudy
Wind	5 NE	13 N	15 N
Clouds.	10 Pm raining	10 Pm 7m/ raining	10 Pm raining

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SUNDAY, OCTOBER 13, 1878.

	8	2	8
Bar.	29.785	29.830	30.020
Att. therm.	53.5	56.7	57.5
Psych; dry + wet.	50.1 44.9	61.2 47.8	52.6 44.2
No. 4.	50.2	61.2	52.9
C 3235 (wet).	45.8	48.9	45.2
Max; wet + set	50.0 50.0		
Min; — " —	40.4 49.8		
Gauge, 2 inches	27 3/8 2.416		
Aurora			Moonlight
Zod. light			Moonlight
Mid	15 NNW	13 NNW	3 NW
Clouds.	3 Cu R Ro 7 Cu	0	0

Lunar halo 9½ P.M.; did not continue definite enough for measurement.

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MONDAY, OCTOBER 14, 1878.

	8	2½	8
Bar.	30.241	30.180	30.179
Att. Therm.	56.2	61.3	58.4
Psych; Dry & wet.	46.2 42.5	58.8 49.7	50.5 47.9
No. 4	46.3	59.0	51.0
C 3235 (Dry & wet)	44.0	51.5	49.4
Max; thermometer.	62.5 47.0		
Min; — " — .	41.8 45.9		
Gauge, ozs inches	0		
Aurora			Moonlight
Zod. light			Moonlight
Wind	0 WNW	2 ESE	3 S
Clouds	3 Pm 7m → Rs	0 haze	0

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TUESDAY, OCTOBER 15, 1878.

	8	2	8
Bar.	30.114	30.024	30.076
Att. Therm.	57.0	62.3	62.8
Psych; dry ther.	53.3 54.1	71.1 59.9	60.0 55.8
No. 4	55.1	71.4	60.2
C. 3235 (wet)	54.7	61.0	56.8
Max. sunset & set.	59.5 55.3		
Min; — " — .	45.7 54.6		
Gauge of Inches	0		
Aurora			Moonlight & clouds
Zod. light			Moonlight & clouds
Wind	6 SSW	7 SW	6 SW
Clouds	1 R Rs Fm	7 R Rs Fm →	3 Pm Fm →

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1878phae.proj..377..

WEDNESDAY, OCTOBER 16, 1878.

	8	2	8½
Bar.	30.192	30.070	30.053
Att. Therm	59.1	65.8	64.2
Psych; dry + wet	58.7 57.7	73.4 63.7	58.8 57.7
No. 4	58.6	73.3	59.4
© 3235 (wet)	58.0	64.7	58.6
Max; max set	70.9 58.6		
Min; — " —	52.6 57.6		
Gauge, 9, 7 inches	0		
Aurora			None
Zod. light.			None
Mid Clouds	1 SW 9 Pm Fm	2 SSW 1 PiRs Fm	3 S 0 Rs

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THURSDAY, OCTOBER 17, 1878.

	8	2	8
Bar.	30.073	30.025	30.032
Att. therm.	60.7	68.3	67.0
Psychr. dry wet	62.5 61.3	75.1 66.8	61.9 59.9
~~C. 3235 (wet)~~			
No. 4	62.3	75.7	62.6
C. 3235 (wet)	61.7	69.7	60.9
Max; wet & set	73.0 62.2		
Min; — " —	52.8 61.8		
Gauge oz. & inches	0		
Aurora			None; from clouds
Zod. light			None
Wind	5 SW	7 SSW	4 SSW
Clouds	4 Pr Rs Fm	9 Pr Rs	1 P haze

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FRIDAY, OCTOBER 18, 1878.

	8	2	8
Bar.	29.901	29.766	29.650
Att. Therm.	63.0	67.2	66.9
Psych. dry therm.	62.7 60.9	71.5 64.0	60.5 59.5
No. 4	62.6	72.0	60.8
C. 3235 (wet)	61.2	65.0	60.2
Max. musch. sch	75.1 62.4		
Min. —— " ——	56.3 62.0		
Gauge, oz. + inches	0		
Aurora			Cloudy
Zod. light.			Cloudy
Wind	7 S	6 SSE	0 calm
Clouds	1 Pm M 7m	3 M 7m	9 P

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1878phae.proj.0377

SATURDAY, OCTOBER 19, 1878.

	8	2	8
Bar.	29.518	29.500	29.558
Att. Therm.	63.0	61.3	59.7
Psych; dry & wet.	53.6 50.6	51.2 46.7	45.0 40.7
No. 4	53.9	51.9	45.4
C. 3235 (wet)	51.2	48.0	41.6
Max; max set & set.	72.0 54.9		
Min; — " —	52.1 53.1		
Gauge 22 inches	0 7/8 0.077		
Do Aurora			Cloudy
Zod. light.			Cloudy
Wind	9 S W	8 W S W	7 S W
Clouds.	10 Pm M 7m	10 Pm 7m	10 P

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SUNDAY, OCTOBER 20, 1878.

	8	2	8
Bar.	29.700	29.779	29.900
Att. therm.	55.7	59.0	58.9
Psych; dry + wet.	44.5 39.5	54.7 42.3	51.2 43.3
No. 4.	44.6	54.8	51.2
C. 3235 (corrd)	40.4	43.4	44.2
Max; max set + set	56.9 45.5		
Min; —— " ——	39.2 44.0		
Gauge, 2 inches	0		
Aurora			
Zod. light.			None Cloudy
Wind	9 WSW	9 W	7 SW
Clouds	9 Pr Pm Fm →	0 Rs Fm	1 P

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MONDAY, OCTOBER 21, 1878.

	8	2	8
Bar.	30.088	30.080	30.122
Att. Therm.	57.5	62.3	63.6
Bych; dry wet.	49.2 43.9	67.4 55.4	57.8 51.6
W. 4	48.9	67.5	57.8
C 3235 (wet)	45.1	56.5	53.2
Max; wet + wet	55.2 49.6		
Min; — " —	43.9 48.5		
Gauge, dry wicks	0		
Aurora			None
Zod. light			None
Wind	0 W	1 W	0 calm
Clouds	0 haze 7m	0	0 haze

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TUESDAY, OCTOBER 22, 1878.

	8	2	8
Bar.	30.201	30.172	30.132
Att. Therm.	59.0	64.7	57.7
Psych, Dry-bulb.	47.3 45.3	61,5 53,5	57.0 50.5
No. 4	47.0	61,8	51,5
C. 3235 (wet)	46.2	55.0	51,2
Max, since 8 set	68.0 47.8		
Min, — " —	42.6 46.4		
Gauge, 0z & inches	0		
Aurora.			Hazy
Zod. light.			Hazy
Wind	0 calm	2 E	1 E
Clouds.	0 haze	0	1 haze

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WEDNESDAY, OCTOBER 23, 1878.

	8	2	8
Bar.	29.979	29.649	29.502
Att. therm.	57.2	57.9	59.3
Psych; dry & wet.	53.3 51.3	54.9 54.6	61.2 62.0
No. 4.	53.6	55.5	62.5
C. 3235 (wet)	52.0	55.1	62.8
Max; ——— & ———.	61.3 54.0		
Min; ——— " ———.	46.3 52.9		
Gauge, oz + inches	0		
Aurora.			
Mod. light.			Cloudy Cloudy
Wind.	6 E	9 ESE	5 SE
Clouds.	10 Pm 7m —	10 Pm; raining	10 Pm; raining

Rain began about 10 3/4 A. M.

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THURSDAY, OCTOBER 24, 1878.

	8	2	8
Bar.	29.658	29.793	30.047
Att. therm.	62.2	59.3	59.1
Psych; dry & wet.	53.9 48.6	58.4 49.5	50.2 45.2
Ho.4	54.2	58.6	50.7
C.3235 (wet)	49.4	50.2	46.0
Max; maxet + set.	62.0 54.3		
Min; — " — .	52.1 53.4		
gauge, ozr niches	19 1.688		
Aurora			Cloudy
Sod. light			Cloudy
Wind	11 NW	16 NNW	10 NNW
Clouds.	10 Pm Fm	2 Pt Pm Fm	8 P

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FRIDAY, OCTOBER 25, 1878.

	8	2	8
Bar.	30.222	30.252	30.302
Att. Therm.	55.4	60.7	59.7
Psych; dry & wet.	47.7 43.4	57.1 50.4	49.1 47.7
No. 4.	48.2	57.5	50.0
C. 3235 (wet)	44.2	51.5	48.8
Max; max't & set	58.5 48.8		
Min; — " —	46.9 47.2		
Gauge, 0.7 inches	0		
Aurora			
Prod. light			Cloudy Cloudy
Wind.	7 NW	5 NE	0 NE
Clouds.	10 Pm Fm	6 Pm M Fm	9 P

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SATURDAY, OCTOBER 26, 1878.

	8	2	8
Bar.	30.375	30.326	30.297
Att. Therm.	56.0	60.0	59.5
Psych; dry + wet.	47.5 46.4	57.8 53.2	47.9 46.9
No. 4	47.3	58.1	48.8
C. 3235 (wet).	47.0	54.5	48.4
Max; sunset + set.	58.1 48.3		
Min; — .. —.	44.4 46.8		
Gauge, oz. + inches	○		
Aurora			None
Tod. light.			Suspected
Wind	0 W	2 SE	1 SE
Clouds	0 Rs haze	3 haze M Fm —	0 P

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SUNDAY, OCTOBER 27, 1878.

	8	2	8
Bar.	30.210	30.068	30.000
Att. therm.	55.1	58.9	59.3
Psych; dry & wet.	51.1 50.0	61.0 55.2	54.7 51.8
No. 4	51.5	61.8	55.1
C. 3235 (wet).	50.9	56.1	52.9
Max; maxet & sch.	60.0 52.2		
Min; — " —	44.2 50.5		
Gauge, oz; & inches	0		
Aurora			
Zod. light.			
Wind	4 SSE	6 S	5 SSE
Clouds.	10 Pm 7m/1	8 RR Pm 7m/ 7m//	10 P

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MONDAY, OCTOBER 28, 1878.

	8	2	8
Bar.	29.993	30.012	30.123
Att. Therm.	56.4	57.3	55.9
Psych; dry & wet	46.2 42.0	50.4 42.0	41.0 37.3
No. 4	46.5	50.6	42.1
C. 3235 (wet).	42.9	43.0	39.3
Max; wet & sch.	62.0 48.0		
Min; — .. —	45.2 45.9		
Gauge, 0. 7 inches	0		
Aurora.			None; some clouds suspected
Tod. light			
Wind	7 WNW	6 NW	2 NW
Clouds	0 P	0 Fm	0 P Fm

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TUESDAY, OCTOBER 29, 1878.

	8	2	8
Bar.	30.232	30.200	30.212
Att. Therm.	49.3	54.3	49.7
Psych; dry & wet.	34.0 32.4	47.0 40.4	39.8 38.7
No. 4.	34.4	47.6	41,0
C. 3235 (wet).	33.2	42.5	40.5
Max; unset & set.	50.8 35,8		
Min; —— " ——	31.6 33.8		
Gauge, oz. & inches			
Aurora			
Zod. light.			None suspected
Wind.	1 NW	1 SW	1 E
Clouds.	7 P Ro 7m	1 7m	0 Haze

White frost this morning

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WEDNESDAY, OCTOBER 30, 1878.

	8	2	8
Bar.	30.048	29.817	29.753
Att. Therm.	49.3	51.6	52.8
Psych; dry & wet.	46.5 45.8	49.3 49.5	47.6 47.8
Vo. H	47.4	49.8	48.4
C. 32.35 (wet).	46.6	50.0	48.3
Max; unset & set	48.8 48.0		
Min; — " —	33.6 46.7		
gauge, oz. & inches	0 ½ 0.044		
Aurora			Cloudy
Zod. light.			Cloudy
Mid. Clouds.	7 SE 10 Pm 7m ↖ raining	6 E 10 Pm raining	2 N 10 Pm a little rain

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THURSDAY, OCTOBER 31, 1878.

	8	2	8
Bar.	29.653	29.558	29.578
Att. Therm.	51.8	52.4	53.5
Psych, dry & wet	44.8 45.0	50.0 49.0	46.8 44.9
No. 4.	45.7	50.5	47.2
C. 3235 (wet).	45.8	50.0	46.0
Max; wet & dry	50.0 45.8		
Min; — " —	43.0 45.0		
Gauge, ozs & inches	6 0,530		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	0 calm	0 calm	0 calm
Clouds.	10 Pm fog	10 Pm fine	10 Pm

A little rain at times

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FRIDAY, NOVEMBER 1, 1878.

	8	2	8
Bar.	29.753	29.869	29.973
Att. Therm.	49.4	53.8	50.7
Psych, dry & wet.	40.3 37.6	44.4 38.0	36.9 34.0
No. 4.	40.7	45.1	37.5
C. 3235 (wet).	38.6	39.0	35.5
Max; wet & set.	51.6 42.0		
Min; — " —	37.4 39.8		
Gauge, dry & wet	0¼ 0.022		
Aurora.			Cloudy
Zod. light.			Cloudy
Mid Clouds.	3 NW 7 Pm 7m →	6 W 6 Rs M 7m →	2 W 9 Pm 7m →

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SATURDAY, NOVEMBER 2, 1878.

	8	2	8
Bar.	30.050	29.960	29.937
Att. therm.	47.0	53.6	51.9
Psychy, dry & wet	36.9 33.8	54.3 43.7	45.8 42.2
No. 4	36.9	54.4	46.7
6.3235 (wet)	35.0	44.9	44.2
Max., wet & dry	46.8 37.9		
Min., " "	34.7 36.7		
Gauge, 0.3 inches.	0		
Aurora			
Zod. light			Moonlight & clouds
			Moonlight
Wind	1 WSW	7 W	2 S
Clouds	0 P 7m haze	0 Pr Rs	1 Pr 7m

A little white frost this morning.

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SUNDAY, NOVEMBER 3, 1878.

	8	2	8
Bar.	30.086	30.149	30.180
Att. Therm.	50.3	53.0	42.0
Psych: Dry Therm.	44.0 41.0	43.4 36.3	33.8 †30.4
No. 4	44.3	44.0	34.3
C. (3235 (wet)	41.8	37.2	†31.5
Max, wet & sch.	54.8 45.1		
Min, — " —.	36.6 43.9		
Gauge, of Rain	0		
Aurora.			
Zod. light.			Cloudy
			Cloudy
Wind	5 NW	7 NNW	2 N
Clouds	0 Pm M Fm	0	9 Pr

† Not frozen; wetted at 7 P.M.

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MONDAY, NOVEMBER 4, 1878.

	8	2	8
Bar.	30.022	29.915	29.990
Att. Therm.	42.6	46.1	36.8
Psych: dry therm.	30.5 28.6	38.8 32.3	30.0 23.9
No. 4	30.7	39.3	30.4
C. 3235 (wet)	30.0	33.1	24.9
Max: musel thet	45.3 33.0		
Min; — " —	25.7 30.1		
Gauge. oz. inches	0		
Aurora.			
Zod. light			Moonlight Moonlight
Wind	1 SW	8 NW	6 NW
Clouds	1 P Rs 7m	0 M 7m	0

White frost this morning.

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1878phae.proj.0377

TUESDAY, NOVEMBER 5, 1878.

	8	2	8
Bar.	30,020	29,988	30,002
Att. Therm	35,0	39.3	37.4
Psych; dry & wet	24.6 21.7	36.4 *29.5	30.8 26,8
No. 4	25,0	36,8	31,2
C. 3235 (wet).	22.3	*31.0	28,0
Max; wet & set	44.0 26.7		
Min; — " —	23.0 24,5		
Gauge, oz. & inches	0		
Aurora			
Zod. light.			Moonlight & clouds
			Moonlight
Wind	6 NW	7 NW	4 W
Clouds	0	0 M 7m	3 R R 7m

* Wet bulb not frozen; C. 3235 frozen

Fragment of lunar halo at 10 P.M.

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WEDNESDAY, NOVEMBER 6, 1878.

	8	2	8
Bar.	29.948	29.802	29.784
Att. Therm.	38.0	40.7	37.6
Psychr., dry & wet	28.7 26.5	38.1 34.0	30.3 †28.7
No. 4	29.2	38.7	31.2
C. 3235	27.7	35.0	†30.8
Max., wet & dry	37.7 30.2		
Min. — " —	24.3 28.2		
Gauge, 0.3 Inches	0		
Aurora			
Zod. light			Moonlight
			Moonlight
Wind	1 SW	5 WSW	0 WSW
Clouds	10 Pr 7m —	10 PM 7m —	0 P

† Not frozen; wetted at 7 P.M.

A few snowflakes about 10 A.M.

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1878phae.proj.0377.

THURSDAY, NOVEMBER 7, 1878.

	8	2	8
Bar.	29.740.	29.596	29.550
Att. Therm.	36.6	44.1	43.8
Psych; dry-wet.	25.7 25.4	41.2 34.1	37.0 32.5
Nov. 4.	25.8	41,5	37,2
C. 32 35	26.2	35.0	34.0
Max; wet & dry.	38.2 28.0		
Min; — " —	22.9 25.3		
Gauge, ozs inches	0		
Aurora			
Zod. light			
Wind.	0 SW	6 W	2 SW
Clouds	0 Rs	6 R Rs R	10 P
		N 7m s	

White frost this morning.

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1878phae.proj.0377

FRIDAY, NOVEMBER 8, 1878.

	8	2	8
Bar.	29.491	29.513	29.614
Att. Therm.	39.8	40.8	39.9
Psych, dry & wet	29.0 26.9	35P 29.9	30.2 26.7
No. 4.	29.6	35.7	30.7
C. 3235 (mt).	28.0	30.7	27.7
Max; wet & dry	42.4 30.6		
Min; — " —	25.4 29.1		
Gauge, & Nichols	0 1/4 0.022		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind	6 NW	14 NW	11 NW
Clouds.	1 P 7m	6 PM 7m Rs	9 Pn Rs

A little Snow fell about 13h 35m Qm Nov. 7

A little snow on the ground this morning.

~~Snow fell about 11 3~~

Lunar halo 8 P.M; measured diameters with diopter about 8½ P.M. as follows: Inside 23 1/4; outside 26 3/8; inside 21 7/8 (halo brighter at this measure); outside 25 3/4; inside 23 1/4 (halo fainter again).

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1878phae.proj...877...

SATURDAY, NOVEMBER 9, 1878.

	8	2	8
Bar.	29.602	29.548	29.571
Att. Therm.	38.0	40.1	46.5
Psych; dry & wet.	33.8 29.2	39.3 31.4	34.3 29.9
No. 4.	34.1	39.8	34.8
He 3235 (met).	29.8	32.0	31.0
Max; max & set.	37.8 34.9		
Min, — " —.	28.9 33.7		
Gauge, 0 & inches	0		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	10 NW	13 NW	5 W
Clouds	9 P Ro 7m	10 P 7m	9 P 7m

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1878phae.proj.:877.

SUNDAY, NOVEMBER 10, 1878.

	8	2	8
Bar.	29.640	29.693	29.806
Att. Therm.	38.7	42.8	42.1
Psychr. dry & wet.	35.9 31.7	43.4 36.1	35.9 32.6
No. 4.	36.4	43.8	36.4
C. 3235 (wet).	32.7	37.0	33.8
Max; wet & dry.	41.3 36.7		
Min; — " —.	32.6 35.6		
Gauge, or Inches	0		
Aurora.			
Zod. light			Cloudy Moonlight
Wind.	7 NW	6 NNW	1 NNW
Clouds.	2 Pm 7m ↘	1 M 7m ↘	8 Pm 7m ↘

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1878phae.proj...877 .

MONDAY, NOVEMBER 11, 1878.

	8		2		8	
Bar.	29.761		29.696		29.670	
Att. Therm	40.8		48.8		49.4	
Psych. Dry-wet	40.6	38.4	55.1	47.3	46.3	43.5
No. 4.	40.5		55.4		46.8	
C, 3235 (wet).	39.3		48.4		45.0	
Maig, wet & wet.	43.7	41.2				
Maig —"—	36.0	40.2				
Gauge, 0 inches	0					
Aurora.						
Tod. light.					Cloudy	
					Cloudy	
Wind	2 SW		2 SW		2 S	
Clouds	10 P 7m →		9 P 7m		10 P 7m → a few stars visible	

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1878phae.proj.0377

TUESDAY, NOVEMBER 12, 1878.

	8	2	8
Bar.	29.382	29.420	29.568
Att. Therm.	48.4	51.8	52.0
Psych. dry wet	51.7 51.8	56.7 49.9	47.5 43.5
No. 4.	52.3	57.2	49.9
C. 3235 (wet)	52.2	50.9	44.4
Max. wet & dry	55.3 51.2		
Min. — " —	40.2 51.5		
Gauge, ozs. inches.	1 3/8 0.121		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	6 SW	4 W	0 calm
Clouds	10 Pm 7m 7m	10 Pm 7m	3 P 7m

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1878phae.proj...377...

WEDNESDAY, NOVEMBER 13, 1878.

	8	2	8
Bar.	29.643	29.550	29.795
Att. Therm.	45.8	47.7	44.9
Psych; dry wet.	40.4 38.4	45.6 41.4	39.9 35.5
No. 4.	40.4	45.9	40.5
☿ (3235) Wet.	39.3	42.1	36.6
Max; wet dry.	57.0 41.5		
Min; —"—	35.4 39.9		
Gauge, ozinches	0		
Aurora.			
Ind. light.			Moonlight
			Moonlight
Wind.	4 SSW	8 W	7 W
Clouds.	10 P 7m	9 PM 7m	0 P 7m

Shower about 1½ P.M.

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1878phae.proj.0377

THURSDAY, NOVEMBER 14, 1878.

	8	2	8
Bar.	30.134	30.186	30.300
Att. Therm.	40.6	46.0	39.0
Psych, dry & wet.	30.5 28.0	39.7 32.7	32.6 †28.8
No. 4	30.5	40.0	33.2
C. 32 35 (wet)	29.8	33.7	†30.6
Mag; muscl & reh.	50.9 31.7		
Mic; — " —	28.1 30.2		
Gauge, oz miches	0		
Aurora.			× Traces
Zod. light			× Suspected
Wind.	1 WSW	7 NW	0 calm
Clouds.	0 P 7m	0	0

× At 7 P.M. distinct low auroral arch; Zodiacal light strongly suspected.

† Not frozen; wetted at 7 P.M.

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FRIDAY, NOVEMBER 15, 1878.

	8		2		8	
Bar.	30.465		30.450		30.496	
Att. Therm.	37.7		45.0		44.8	
Psych; dry therm.	25.8	24.3	41.7	34.5	34.0	30.7
Wet.	26.0		42.1		35.0	
C. 3235. (wet)	25.1		36.8		33.4	
Max; minet rech	40.0	27.2				
Min; —— " —	23.6	25.8				
Gauge, 2 inches	0					
Aurora.						
Tod. light.					Cloudy	
					Cloudy	
Wind.	0 NW		0 calm		0 calm	
Clouds.	0 Rs		5 P Rs		5 P haze	

White frost this morning

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1878phae.proj.0377.

SATURDAY, NOVEMBER 16, 1878.

	8	2	8
Bar.	30.500	30,448	30,390
Att. Therm.	38,8	44,8	45,0
Psych. dry & wet	26.0 25,8	43,5 39,5	39,0 37,8
No. 4	26,2	44,0	40,1
C. 3235 (Wet)	26,3	40,8	40,0
Max. min. set to read	42,3 27,8		
Min. ——"——	23,0 25,9		
Gauge & inches	0		
Aurora.			
Zod. light.			Cloudy Cloudy
Wind.	0 NNW	5 E	1 SE
Clouds.	8 P Rs Fm	5 Pr Pm Rs M Fm	4 P Thaze

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1878phae.proj.377.

SUNDAY, NOVEMBER 17, 1878.

	8	2	8
Bar.	30.324	30.273	30.262
Att. Therm.	43.3	46.0	46.8
Psych. dry therm.	39.5 38.3	45.9 43.8	42.7 42.6
No. 4.	40.0	46.5	43.3
C. 3235 / Mot.	39.2	44.8	43.2
Max. minset rseh	45.0 40.4		
Min, — " —	25.7 39.3		
Gauge, ozmicles	0		
Aurora.			
Tod. light.			Cloudy
			Cloudy
Mid	2 N	4 E	4 E
Clouds	10 Pm fm —	10 Pm fm: a little rain	10 Pm mist

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1878phae.proj.:877.

MONDAY, NOVEMBER 18, 1878.

	8	2	8
Bar.	30.118	29.963	29.867
Att. therm.	45.4	46.0	46.1
Psychs, dry & wet	41.9 42.2	43.0 43.4	41.9 42.4
No. 4	42.5	43.6	42.6
C. 3235 (wet)	43.1	44.0	43.0
Max, unset & set	48.4 42.8		
Min., —, —	39.4 41.9		
Gauge, 0.5 inch.	13/8 1.158		
Aurora			
Zod. light			
			Cloudy Cloudy
Wind	5 NE	6 NE	7 NE
Clouds	10 Pm; raining	10 Pm Fm 44; raining	10 Pm; raining

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1878phae.proj.1877...

TUESDAY, NOVEMBER 19, 1878.

	8		2		8	
Bar.	29.856		29.842		29.902	
Att. therm.	42.0		43.9		44.8	
Psychr., dry & wet	35.9	35.7	43.7	41.5	41.6	39.9
No. 4	36.1		44.3		43.2	
C. 3235 (wet)	36.4		42.2		41.0	
Max., unst. & set	43.4	36.5				
Min., " "	32.8	36.0				
Gauge, 0.2 inch.	$22\frac{3}{4}$	2.008				
Aurora						
Zod. light						
Wind	8 NNW		4 N		2 NE	
Clouds	10 Rn Fm		10 Rn Fm		10 P	

Cloudy
Cloudy

A little snow on the ground this morning.

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1878phae.proj.:377.

WEDNESDAY, NOVEMBER 20, 1878.

	8		2		8	
Bar.,	29.826		29.698		29.737	
Att. therm.	42.8		42.5		42.7	
Psych., dry & wet	36.8	36.2	36.8	37.2	37.0	36.9
No. 4	37.5		37.4		37.8	
C. 3235 (wet)	37.1		37.9		37.8	
Max., unwet bat	44.0	38.0				
Min., —"—	35.7	37.0				
Gauge, 07, 5inch	0					
Aurora					Cloudy	
Zod. light					Cloudy	
Wind	4 NNE		5 N		3 N	
Clouds	10 P		10 Pm; raining		10 P	

@ Middle of day rainy.

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1878phae.proj.:377 .

THURSDAY, NOVEMBER 21, 1878.

	8	2	8
Bar.	29.825	29.828	29.870
Att. therm.	42.0	50.8	46.2
Psych., dry & wet	38.9 38.8	48.3 46.4	41.6 41.5
No. 4	39.4	48.7	42.3
6.3235	39.8	47.1	42.3
Max., wet & set	39.3 39.6		
Min., — " —	35.8 39.0		
Gauge, oz. & inch.	3 1/4 0.287		
Aurora			Cloudy
Zod. light			Cloudy
Wind	2 SW	1 SW	1 N
Clouds	10 P	3 P Fm haze	8 P fog

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FRIDAY, NOVEMBER 22, 1878.

	8	2	8
Bar.	29.646	29.175	29.012
Att. Therm.	46.0	46.7	48.2
Psych; dry & wet.	43.5 43.7	46.4 46.7	48.2 48.4
No. 4	44.2	47.0	48.8
C. 3235 (wet)	44.4	47.3	49.0
Max; max & wet	48.1 44.2		
Min; — " —	38.9 43.6		
Gauge, oz; & inches	1 0.088		
Aurora			
Zod. light			Cloudy Cloudy
Wind	7 ENE	16 E	5 NE
Cloude	10 P.M. raining	10 P.M. 7 P.M. raining	10 P.; a little rain

At 7 P.M.
Bar. 29.064
Att. Th. 48.2

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SATURDAY, NOVEMBER 23, 1878.

	8		2		8 1/4	
Bar.	28.959		29.062		29.269	
Att. Therm	47.0		47.7		46.0	
Psych; dry wet	39.9	40.1	44.6	41.5	40.7	37.7
No. 4	40.7		44.9		41.1	
C. 3235 (wet)	41.1		42.1		38.3	
Max; maxet & set	48.7	41.3				
Min; —"—	39.4	40.0				
Gauge g.; Nichols	17 3/4	1.567				
Aurora					Cloudy	
Zod. light					Suspected	
Wind	0 calm		6 WSW		7 SW	
Clouds	6 P 7m fog		8 P 7m Rs		1 P 7m haze	

Some rain in the forenoon.

At 8 1/6 A.M.
Bar. 28.963
Att. th. 47.0

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SUNDAY, NOVEMBER 24, 1878.

	8	2	8
Bar.	29.608	29.745	29.892
Att. Therm.	43.3	48.0	45.0
Psychrometer, Dry Therm.	40.5	45.8	40.1
~~C. 3235 (Mrt),~~	37.6	39.8	36.5
No. 4	40.8	46.3	40.4
C. 3235 (Mrt,	38.7	40.8	37.7
Max; sunset rock	45.8	41.3	
Min; — " —	38.9	40.2	
Gauge 2 rnicles	0 1/8	0.011	
Aurora			None
Zod. light			† Distinct
Mid Clouds	6 W	7 WNW	2 SW
	5 Pm 7m 7m →	9 Pm 7m →	0

† Extending beyond Capricornus to southern branch of Milky Way (from the Pleiades to Aquila).

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1878phae.proj...377...

MONDAY, NOVEMBER 25, 1878.

	6	2	8
Bar.	29.976	29.881	29.774
Att. Therm.	41.8	42.5	43.3
Psych; dry + wet	33.3 32.5	38.8 37.9	39.6 39.0
No 4.	33.6	39.7	40.3
C. 8235 (wet)	33.6	39.1	39.8
Max; max + set	46.3 35.2		
Min; — " —	32.1 33.1		
Gauge, 0.7 inches	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	1 W	1 W	2 NW
Clouds	9 P Fm →	10 Pm Fm ↗	10 P

White frost this morning.
Some rain after 11 A.M.

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1878phae.proj.377

TUESDAY, NOVEMEBER 26, 1878.

	8	2	8
Bar.	29.988	30.082	30.152
Att. Therm.	43.0	45.7	38.8
Psych; dry + wet.	35.7 32.4	39.3 34.1	32.3 29.5
No. 4	36.2	39.7	32.8
C. 3235 (Mel)	33.1	35.0	30.4
Max; max. + wet	41.3 37.0		
Min; — " —	33.0 35.8		
Gauge, ozmuches	0 3/8 0.033		
Aurora			None
Zod. light			Distinct, as Nov. 24
Wind	6 NW	5 NW	3 NW
Clouds	9 Pc Pm Fm → Sm	1 P Rs Fm	0

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1878phae.proj...377...

WEDNESDAY, NOVEMBER 27, 1878.

	8	2	8
Bar.	30.180	30.106	29.888
Att. Therm.	37.1	43.0	42.2
Psych; dry + wet.	23.9 23.9	36.8 33.5	39.4 39.5
No. 4	24.3	37.7	40.4
C. 3235 (wet)	24.6	35.0	40.2
Max; unset + ext	40.6 25.6		
Min; —"—	23.2 23.8		
Gauge & inches	0		
Aurora			
Zod. light			Cloudy
			Cloudy
Wind	1 W	3 SE	5 NE
Clouds	0 P Rs haze	9 Pm Sm	10 P, raining

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THURSDAY, NOVEMBER 28, 1878.

	8	2	8
Bar.	29.422	29.378	29.548
Att. Therm.	46.0	48.1	47.7
Psych; Dry-bulb	50.6 50.6	49.9 49.1	42.3 39.1
No. 4	50.6	50.4	42.9
C. 3235 (Wet)	50.8	50.0	40.0
Max; max set,	54.6 49.4		
Min; — " —	23.5 49.8		
Gauge; ozs rain	13 1.147		
Aurora			
Zod. light.			Cloudy Cloudy
Wind	2 SSW	3 SW	6 NW
Clouds	10 Pm mist	10 Pm fog mist and rain	10 P

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FRIDAY, NOVEMBER 29, 1878.

	8		2		8	
Bar.	29.935		29.968		30.034	
Att. Therm.	41.7		47.8		45.2	
Psych; dry + wet	34.9	31.3	43.7	37.9	38.9	35.5
No. 4	35.1		44.1		39.6	
C 32 35 (wet)	32.2		39.0		37.7	
Max; unset + set	53.0	36.0				
Min; — " —	34.0	34.9				
Gauge; ozruche	0 5/8	0.055				
Aurora						
Zod. light						
Wind	4 NW		4 W		2 SW	
Clouds	0 PRo Fm		9 Pm Fm →		8 Pm Fm →	

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SATURDAY, NOVEMBER 30, 1878.

	8	2	8
Bar.	30.152	30.189	30.338
Att. Therm.	41.2	48.4	41.3
Psych; dry & wet. P	35.4 32.3	45.2 38.5	34.6 31.7
No. 4	35.4	45.5	35.2
C. 3235 (wet)	33.4	39.4	32.8
Max; sunset rest	44.6 36.7		
Min; — " —	33.5 35.2		
Gauge; oz & inches	0		
Aurora			
Zod. light			Moonlight and cloudy Clouds
Wind	0 W	1 W	1 NW
Clouds	0 P	8 A Rs Pm M fm →	8 Pc Rs fm →

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1878phae.proj.0377

SUNDAY, DECEMBER 1, 1878.

	8	2	8
Bar.	30.172	30.470	30.399
Att. Therm.	39.0	47.7	37.2
Psych; Dry-wet.	26.3 25.3	36.0 32.2	28.9 28.1
No. 4	26.6	36.6	29.8
C. 3235 (wet).	26.3	33.0	28.9
Max; wet-bulb	45.5 28.0		
Min; — " —	25.2 25.9		
Gauge; ozs. inches	0		
Aurora			Cloudy
Zod. light			Cloudy
Wind	1 SW	0 W	1 NW
Clouds	5 Pr Rs →	5 Pr Rs Rn Fm →	6 P Fm ↗

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1878phae.proj..377.

MONDAY, DECEMBER 2, 1878.

	8	2	8
Bar,	30.165	29.783	29.527
Att. Therm.	41.0	44.7	49.5
Psychy dry+wet	42.2 40.7	46.5 46.3	55.7 55.3
			&
No. 4.	42.6	47.2	56.5
C. 3235 (mch).	41.2	47.0	55.9
Max; max+wet.	42.7 42.9		
Min; — „ —	25.7 42.0		
gauge, of rnches	0		
Aurora			
Zod. light.			Cloudy
			Cloudy
mid	8 ESE	10 SE	18 SSE
Clouds	10 Pm 7m —	10 Pm 7m = raining	10 Pm raining

Rain beginning about 1 P.M.

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1878phae.proj.0377.

TUESDAY, DECEMBER 3, 1878.

	8	2	8
Bar.	29,423	29.506.	29.609
Att. Therm.	49.0	52.0	45.7
Psychj dry + wet.	44.0 41.5	45.2 39.0	40.5 36.8
Noft.	44.5	45.8	41.2
C. 32 35 (mft).	42.3	40.2	38.3
Max; max et + set	56.3 44.7		
Min; — " —	42.0 43.9		
Gauge, ozmiches	9 1/4 0.816		
Aurora			Cloudy
Zod. light			Cloudy
mid	7 WSW	7 W	0 calm
Clouds	5 Pm Fm →	3 Pm Fm →	9 Pm Fm →

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1878phae.proj.377.

WEDNESDAY, DECEMBER 4, 1878.

	8	2	8
Bar.	29.500	29.333	29.435
Att. Therm	45.2	45.4	49.0
Psych: Dry Wet.	40.0 38.7	43.7 43.4	36.5 ~~35.8~~ 35.8
Nott.	40.3	44.3	37.3
C. 3 = 35 (Wet)	40.0	44.0	36.9
Max; max dech	46.3 42.0		
Min; — " —	38.6 40.2		
Gauge, 9 inches	0 1/4 0.022		
Aurora			
Zod. light			
Mid	3 E	2 E S E	0 (W?)
Clouds	10 Pm 7m —	10 Pm 7m	10 PM
			(W.U)

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1878phae.proj.377

THURSDAY, DECEMBER 5, 1878.

	8	2	8
Bar.	29.477	29.508	29.613
Att. Therm	42.0	47.0	40.2
Psych, Dry-bulb.	33.5 31.5	34.2 30.4	30.3 26.7
Nor.	34.0	34.8	30.7
C3235 (Wet)	32.1	32.8	27.8
Max; minset Set	44.0 35.3		
Min; — " —	32.1 33.3		
Gauge, 24 inches	1¼ 0.110		
Aurora			
Zod. light			Cloudy Cloudy
Wind	5 NW	6 W	5 W
Clouds	10 P Fm	5 Pm Fm	10 P Fm

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1878phae.proj.0377

FRIDAY, DECEMBER 6, 1878.

	8	2	8
Bar.	29.683	29.701	29.770
Att. Therm.	35.7	46.9	35.3
Psych; dry thrt	26.0 22.9	32.2 27.8	27.0 23.8
No. 4	26.2	32.4	27.5
C. 3235 (wet)	23.8	28.8	24.8
Max; unsetwet	36.0 28.0		
Min; — " —	24.2 25.9		
Gauge; of inches	0		
Aurora			
Zod. light			Moonlight
			Moonlight
Mid	4 W	7 W	5 W
Clouds	5 P 7m	5 M 7m → Rs	0 Rs

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SATURDAY, DECEMBER 7, 1878.

	8	2	8
Bar.	29.928	29.940	30.026
Att. Therm.	31.7	39.8	27.0
Psych; Dry Wet.	16.6 16.0	26.0 22.0	20.3 18.8
No 4.	16.8	26.3	20.9
C. 3235 (not).	16.6	22.9	19.7
Max; mixed vert.	32.8 19.6		
Min; —..— .	15.0 16.1		
Gauge, ozonides	0		
Aurora			
Zod. light			Cloudy Cloudy
mid	1 W	6 NW	1 NW
Clouds	0 PRs 7m	1 7m	5 P 7m

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1878phae.proj.:877.

SUNDAY, DECEMBER 8, 1878.

	8	2	8
Bar.	30.200	30.249	30.291
Att. Therm.	29.4	37.4	28.7
Psych; dry-wet.	17.0 16.6	26.9 23.8	21.9 19.8
No 4.	17.2	27.5	23.2
C. 3235 (met)	17.2	24.3	21.9
Max; met & set	26.7 19.0		
Min — " —	14.4 16.8		
Gauge; oz & inches	0		
Aurora			
Zod. light			Moonlight Moonlight
Mid	1 W	5 NW	0 W
Clouds	0 P	3 R R R	0 Rs

Lunar halo about 9½ P.M.

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1878phae.proj...877...

MONDAY, DECEMBER 9, 1878.

	8		2 1/4	8
Bar.	30.267		30.108	
Att. Therm.	29.7		32.0	
Psychr. Dry & wet	22.8	21.8	28.8	28.3
No. 4	23.3		29.7	
C. 3235 (wet)	23.0		29.4	
Max. wet read	28.0	24.3		
Min. — " —	16.8	22.8		
Gauge, oz. inches	0			
Aurora				
Zod. light				
Wind	0 E		2 E	
Clouds	10 P		10 P; snowing	

Snow began about 8½ A.M.
Turned to rain in the evening

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1878phae.proj.0377

TUESDAY, DECEMBER 10, 1878.

	8	2	8
Bar.	29.612	29.317	28.996
Att. Therm.	36.9	40.0	45.0
Psychr., dry bulb	37.6 37.9	51.0 51.2	52.9 52.7
No. 4	38.0	51.5	53.2
C. 3235	38.7	51.6	53.2
Max., wet bulb	40.0 38.4		
Min., —"—	22.8 37.6		
Gauge, oz. Rain	8 0.708		
Aurora			
Zod. light			Cloudy Cloudy
Wind	0 NE	4 SE	20 SE
Clouds	10 P fog; raining.	10 Pm 7m Cu raining	10 Pm 7m Cu raining

Wind rose greatly in the afternoon.

At 8 2/3 P.M. Bar. 28.961 Att. th. 46.0

At 10 1/4 P.M. 28.955 46.8

At 8 3/4 P.M. gauge C 14 1/8 oz.

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1878phae.proj.1377.

WEDNESDAY, DECEMBER 11, 1878.

	8	2	8
Bar.	29.066	29.444	29.704
Att. Therm	45.1	45.6	41.7
Psych; Dry & wet	41.4 40.5	41.2 37.5	36.6 31.9
No. 4	41.9	41.7	37.0
C. 32356 Mtf	41.4	38.4	32.9
Max; max & set	53.3 41.9		
Min; — " —	37.2 41.2		
Gauge, oz, 4 inches	×2 0.177		
Rimora			Cloudy
Zod. light.			Cloudy
Wind	7 SW	6 WSW	7 W
Clouds	10 Cu Fm	9 Cu M Fm	8 Cu Fm

* At 8 3/4 P.M. Dec. 10, 1.247 in.
8 A.M Dec. 11, 0.177 "
In all 1.424.

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THURSDAY, DECEMBER 12, 1878.

	8	2	8
Bar.	29.974	30.018	30.119
Att. Therm.	39.8	42.0	37.5
Psych; dry + wet.	34.6 30.7	36.8 31.9	32.9 29.1
No H.	34.8	37.2	33.2
C. 3235 (mth).	31.3	32.8	30.0
Max; wet + ext.	43.5 35.7		
Min; —— " ——	33.5 34.5		
Gauge, 9 inches	0		
Aurora.			
Zod. light.			Moonlight Clouds Cloudy
Wind	3 W	4 W	4 WNW
Clouds	9 P 7m	8 Cu M 7m a few snowflakes	9 P 7m

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1878phae.proj.377 .

FRIDAY, DECEMBER 13, 1878.

	8	2	8
Bar.	30.148	30.150	30.170
Att. Therm.	37.6	43.0	37.6
Psych; dry + wet.	30.7 28.0	32.6 27.6	28.8 25.7
No. 4.	31.0	33.4	29.5
C. 32 35 (wet).	29.0	28.7	27.0
Max; max + wet.	37.8 31.9		
Min; — " — .	30.4 30.7		
Gauge, ozt. nubes Aurora.	0		
Zod. light.			Cloudy Cloudy
Mid Clouds	2 W 1 Pm Fm	9 N 6 Pm Fm →	1 N 9 P

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1878phae.proj.0177

SATURDAY, DECEMBER 14, 1878.

	8	2	8
Bar.	30.046	30.077	30.039
Att. Therm.	35.0	39.5	33.4
Psych; dry & wet.	23.0 21.6	31.1 26.3	27.4 24.8
No. 4	23.5	31.7	27.8
C. 3235 (wet)	22.3	27.0	26.2
Max; max set & set.	34.6 25.0		
Min; — " — .	22.8 23.0		
gauge, 0.3 inches	0		
Aurora			
Zod. light.			None; some clouds *Distinct; vertex near Saturn
Wind	2 NW	4 NNW	0 SW
Clouds	0	0	1 PRs

*0 joins south branch of Milky Way as usual.

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SUNDAY, DECEMBER 15, 1878.

	8	2	8
Bar.	29.856	29.710	29.668
Att. Therm.	34.9	37.0	38.3
Psych, dry & wet.	30.9 30.1	32.1 32.3	32.6 32.8
No. 4	31,5	33.0	33.3
C. 3235 (wet).	32.1	33.0	33.5
Max; since last	32.0 32.0		
Min; — " —.	23.0 31.3		
gauge; oz inches	0½ 0.044		
Aurora.			
Tod. light.			Cloudy Cloudy
Wind	1 SE	3 N	2 NW
clouds	10 P fog	10 P fog; a little rain.	10 P fog

A little snow on the ground this morning

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1878phae.proj.0177

MONDAY, DECEMBER 16, 1878.

	8 1/4		2		8	
Bar.	29.792		29.874		30.002	
Att. Therm.	35.0		48.0		29.0	
Psych; dry & wet	22.5	21.6	27.5	24.0	20.4	19.0
No. 4	23.0		28.0		21.0	
C. 32 35 (wet)	22.3		25.0		19.7	
Max; sunset rad.	33.3	24.0				
Min; — " —	22.4	22.4				
Gauge, 0.177 inches	2					
Aurora					+ None	
Zod. light					*Distinct, vertex near Saturn	
mid clouds	5 WNW		6 NW		3 NW	
	0 Fm		0		0	

× As on Dec. 14

+ Low auroral arch suspected at 9 P.M., certainly seen later, close to horizon, not reaching to γ Ursæ Maj. Some streamers 9½ to 10 P.M. Little or no dark sky below arch.

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TUESDAY, DECEMBER 17, 1878.

	8		2		8	
Bar.	30.109		30.048		29.999	
Att. Therm.	29.8		46.5		33.4	
Psych; dry & wet.	16.9	16.5	26.8	23.0	25.7	23.5
No. 4.	17.1		27.3		26.2	
C. 3235 (wet).	17.1		24.0		24.9	
Max; wet & dry.	28.0	19.0				
Min; — " —	16.2	16.6				
Gauge, & inches	0					
Aurora						
Zod. light.					Cloudy	Cloudy
Wind	0 W		4 NW		0 calm	
Clouds	0		0 Rs		9 Rs	

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WEDNESDAY, DECEMBER 18, 1878.

	2	8
Bar.	29.888	29.940
Att. Therm.	35.8	33.2
Psych; dry & wet.	32.3 28.5	28.9 31.7*
No. 4	33.0	29.8
C. 3235 (wet)	29.6	32.7*
Max; wet & dry.	36.3 26.2	
Min; — " — .	16.8 32.5	
Gauge, q. inches.	0	
Aurora.		0
Zod. light.		Suspected.
Wind	2 W	2 SW
Clouds.	7 Pm Fm	5 Fm
	(W. R.)	(W. R.)

* The bulbs were not wet until about 8. o'clock. At 8.30 the readings of Psych. dry & wet = 28.0 25.8
No. 4 = 28.8
C 3235 = 27.0

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THURSDAY, DECEMBER 19, 1878.

	8	2	8
Bar.	30.031	30.136	30.213
Att. Therm.	32.8	45.2	31.0
Psych; dry wet.	25.5 23.2	27.3 24.3	21.0 19.2
" Wet.	26.0	27.8	22.4
C. 3235 (wet).	24.0	24.2	21.0
Max; wet + dry	35.3 28.0		
Min; — " —	25.3 26.0		
Gauge, oz inches	0		
Aurora.			Faint arch to y Wh. Hy
Zod. light.			To y Aquarii
Wind	0 N.W.	8 N.W.	0 calm
Clouds	1 Fm Rs R	0	0.
	(W.U.)	(W.U.)	(W.U.)

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1878phae.proj.0177.

FRIDAY, DECEMBER 20, 1878.

	8		2		9½	
Bar.	30.267		30.211		30.251	
Att. Therm.	30.3		42.6		34.0	
Psych, dry therm.	20.6	19.6	31.6	27.2	23.0	21.3
No. 4.	21.0		32.3		23.5	
C. 3235 (wet).	20.5		27.9		22.2	
Max; maximum therm.	28.8	24.0				
Min; — " — .	17.8	21.2				
Gauge, 0 inches	0					
Aurora					None	
Zod. light					None	
Wind	1	WSW.	3	NW	4	S.W. (?)
Clouds	1 Pm Fm Rs in NW		9 Pm Fm		0	
	(Wm)		(W. W)		Ft.	

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SATURDAY, DECEMBER 21, 1878.

	8	2	8
Bar.	30.210	30.057	29.676
Att. Therm.	30.5	34.7	33.4
Psych. dry & wet.	19.4 19.2	25.3 24.7	34.0 34.2
No. 4.	20.3	25.9	34.6
C 3235 (wet)	20.0	26.9	34.8
Max. min. & set.	32.3		
Min. — " — .	18.4. 19.7		
Gauge 0.2 inches	0		
Aurora			
Zod. light			Cloudy Cloudy
Wind	4 W S W	1 S E S	6 N E
Clouds	9 P.M. Fine slight fog. FW. at 8.30	10 P.M. snowing Commenced to snow about noon	10 P.M. Snowing FW.

32.5 mu
20.8 21.3
Orbit Psych dry
20.3 20.8

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SUNDAY, DECEMBER 22, 1878.

	8	2	8
Bar.	29.176	29.324	29.482
Att. Therm.	39.8	34.5 (†)	39.8
Psych; dry wet.	* 38.9 37.1	38.3 32.4	31.4 26.6.
No. 4.	39.6	39.0	31.8
C. 3235 (wet).	* 38.0	33.6	27.6
Max; wet & set	49.0 39.2		
Min; — " —	19.5 39.3		
† Gauge, 2 inches	11 3/4 8 1.037		~~none~~
Aurora			none
Zod. light			suspected
Wind	8 WSW (Gusty).	10 SW (rain) WSW	10 W (†)
Clouds.	9 Pm Fm ~~SW~~	2 Pm Fm	0
	F.W.	F.W.	F.W.

† bulbs wetted only 10 or 15 min before reading - It snowed until 8½ Pm last night and then turned to rain and this morning at 8 o'clock there were only a few traces left. Snow probably between 3 and 4 inches. I think the barometer went lower in the night, as it was falling very rapidly at 8 Pm

† This includes the melted snow and the rain

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MONDAY, DECEMBER 23, 1878.

	8	2	8
Bar.	29.610	29.667	29.744
Att. Therm.	35.3	41.8	28.2
Psych; dry wet.	25.2 24.4	28.7 24.6	19.9 17.7
No. 4.	25.3	29.2	20.5
C. 3235 (wet).	24.9	25.7	18.5
Max; wet & set.	40.4 27.2		
Min; —— .. ——.	24.5 25.2		
Gauge, 0 inches	0		
Aurora.			× None
Zod. light.			To y Aquarii
Wind	2 WSW	2 W	4 S.W.
Clouds.	4 P Cu Pa	0 Haze in	0
	4 W.	horizon.	
	wetted bulbs 25 min before reading. (WU)		(W.U.) × Aurora was quite bright 6.30 – 7.00

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TUESDAY, DECEMBER 24, 1878.

	8		2		8	
Bar.	29.661		29.686		29.616	
Att. Therm.	28.6		45.6		27.2	
Psych. Dry mrth.	18.4	15.7	21.7	18.2	17.3	14.8
No. 4	18.2		22.0		17.8	
C. 3235 (mrth)	16.4		19.0		15.6	
Max; sunset mrth.	30.0	21.0				
Min; — " —	17.0	17.8				
Gauge, oz. & inches	0					
Aurora.					0	
Zod. light.					Very marked at 6.30–7.00	
Wind.	5 W		4 W.S.W.		6 SW	
Clouds.	1 Pm in S.E. W.U.		0 W.U.		1 Pm in W horizon W.U.	

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WEDNESDAY, DECEMBER 25, 1878.

	8.20	2.10	8
Bar.	29.582	29.578	29.622
Att. Therm.	26.2	41.3	29.3
Psych. dry wet.	13.0 12.5	27.3 23.2	21.0 19.6
No. 4	13.8	27.8	21.8
C. 3235 (wet).	13.0	24.6	21.0
Max, max set + set.	24.8 17.2		
Min; — .. —	12.0 13.8		
Gauge, oz + inches	0		
Aurora.			0
Tod. light.			Very bright 6.30 – 7.30
Wind.	5 SW	5 WSW	2 S
Clouds	1 Rs in E.	2 PrRsPm	1 Fm in N.
	W.W.	written here at 1.10	W.W.

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THURSDAY, DECEMBER 26, 1878.

	8	2	8
Bar.	29.686	29.662	29.696
Att. Therm.	27.8	45.8	30.8
Psych, dry & wet.	18.8 17.7	28.2 24.2	20.8 19.0
No. 4.	19.2	28.7	21.8
C. 3235 (wet),	18.6	26.0	20.3
Max; max & wet.	23.6 21.0		
Min; — " —	13.8 19.2		
Gauge, ozone, chlor	0		
Aurora.			0
Tod. light.			Moonlight
Wind,	3 WSW	3 W	4 S
Clouds	3 Pm Fm Rs	0 Haze in S	1 Pm in S
	W. U.	W. U.	W. U.

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FRIDAY, DECEMBER 27, 1878.

	8		2		9 3/4
Bar.	29.550		29.472		29.567
Att. Therm.	26.4		29.6		30.5
Psych, dry & wet.	19.4	18.8	25.5	23.8	24.5 . 24.0
No. 4,	20.2		26.6		25.0
C. 3235 (wet)	19.4		24.6		24.6
Max; max & act.	29.0	21.2			
Min; — " —	18.2	20.0			
Gauge, 2 inches	0				
Aurora.					Cloudy
Zod. light.					Cloudy
Wind.	1 N		1 N		1
Clouds	10		10 Slightly snowing		10 P
	W. A		W. A.		A. M.

Began snowing at 11.30 A.M.

snowed a little before 6 P.M. cleared up for an hour and then clouded over again.

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SATURDAY, DECEMBER 28, 1878.

	8	2	8
Bar.	29.811	29.866	29.979
Att. Therm.	29.3	35	32.2
Psych. dry & wet.	23.6 21.9	26.8 23.0	21.4 19.3
No. 4.	24.2	27.0	21.9
C. 3235 (Wet).	22.6	23.9	20.0
Max; minset & set.	26.6 25.3		
Min; — " —	19.6 23.6		
Gauge, 07 inches	0		
Aurora.			
Mod. light.			Clouds. Clouds & moonlight
Wind.	1 W NW	4 N.W.	3 N.W. (2)
Clouds.	8 P Fm Pm → 4 W.	1 Fm slight haze 4 W.	8 P Fm. F.W.

Commenced evening a little about 7.30.

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SUNDAY, DECEMBER 29, 1878.

	8, 10	2	8
Bar.	30.140	30.136	30.136
Att. Therm.	27.0	37.6	31.3
Psych. Dry Wet.	14.8 13.3	24.6 20.9	21.3 19.6
No. 4.	14.0	25.0	21.9
C. 3235. (Wet).	14.1	21.8	21.8
Max, maset & set.	27.7 17.3		
Min, — " —	12.8 13.6		
Gauge, 0 inches	0		
Aurora.			
Zod. light.			Moonlight Moonlight
Wind.	0 W.	1 NW.	0
Clouds.	1 P haze Clr.	5 P haze Clr.	1 very small cloud. haze.

Mock sun seen by E.C.P. at 22h 48m C.S.T.
Sun behind 7th therm. / M.S behind 13th therm as seen from most easterly window of clock room.

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MONDAY, DECEMBER 30, 1878.

	8	2	8
Bar.	29.968	29.904	30.008
Att. Therm.	27.6	44.3	30.5
Psych, Dry & wet.	19.8 20.0	28.2 25.5	22.1 20.7
No. 4.	20.6	28.8	22.5
C. 3235 (wet).	20.7	26.2	21.7
Max; unset & wet.	25.7 21.4		
Min; — " —	13.3 19.8		
Gauge, 24 inches	0 1/4 0.022		
Aurora.			
Ind. light.			Moonlight Moonlight
Wind	0 S	5 NW	1 W
Clouds.	10 P moving	2 Fm	0

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1878phae.proj...877...

TUESDAY, DECEMBER 31, 1878.

	8	2	8
Bar.	30.192	30.163	30.136
Att. Therm.	27.0	45.7	31.5
Psych; dry ther.	15.3 15.3	29.5 25.1	21.3 21.2*
Wet.	15.3	29.8	22.0
C. 3 2 3 5. (wet)	15.9	26.7	22.2*
Max; mustard ther.	29.0 16.8		
Min; —— " ——	13.6 15.1		
Gauge, 3 inches	0 3/8 0.033		
Aurora.			Moonlight
Zod. light.			
Wind	0 W	3 W	0 Calm
Clouds	1 P Fm	2 Pm M Fm	0 Hazy N.
			W. W.

* Bulbs had not been wet — ∴ Regist readings.

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Halos of Feb. 12 & 15.

The question presents itself whether any rings round the moon are necessarily halos in the sense in which these phenomena are confined to rings of certain fixed diameters. The halo of Feb. 15 continued visible till about 11½ P.M., and measures of it were taken during the evening, which made its extreme diameter 46° as nearly as might be; see statement of measures below. Now this halo was so wide that one span of the thumb and middle finger of the right hand of the observer (S.), at arm's length, was very conspicuously less than the inner radius of the halo (the distance from the moon's centre to the inner edge of the ring) while two spans were of course still more clearly less than the diameter. But on Feb. 12 one of these spans was fully equal to the outer radius of the halo, and thus to its outside diameter. It can hardly be supposed that the observer held his hand so much nearer his eye on this first occasion than on Feb. 15 as to account for the whole difference; but unless he did the halo of Feb. 12 was decidedly less than 46° across and yet more than 22°. Its diameter seemed to be

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about 34° to 37°, the value of the span being found to be 17° to 18°½ by repeated trials (spanning round the horizon) on Feb. 12 and also on Feb. 16.

The measures taken of the halo of Feb. 15 were as follows: at 9h 48m mean time Castor, Procyon, and γ Leonis were all nearly on the inner edge of the halo, Castor being thought to be most exactly on the edge, γ Leonis being well inside the ring. A reduction of this observation, (neglecting the moon's parallax) made on Feb. 16, makes the inner radius of the halo by Castor 21°.4, by Procyon 22°.2, and by γ Leonis 21°.0. The inside diameter of the halo was therefore not far from 43°. The halo was measured directly with the West Equatorial by observers P. and S., between 10h and 11h, the method being to point the telescope at the moon, read the declination circle, clamp the telescope in right ascension, and then point the telescope (by looking along the tube, as was also done in the case of the moon), on the northern and southern edges of the halo. P. measured only the inside diameter S. both outside and inside diameters, as follows:

Time	Observer	Reading for moon.	Inside north edge.	Outside north edge.	Inside south	Outside south
10h 32m	P.	19°½	41°½		−2°	
	P.	19½	42		−2½	
	S	19½	41¾	43°¾	0	−2¾

Hence P. makes inside diameter 41°¾, outside diameter 46°½. S. makes inside

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γ Leon

α

β Leon.

"Gegenschein" at 10¼ P.M.
Feb. 27, 1878.

β Virg

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